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Action Item

Educational Policy and Programs Committee

Regional Higher Education Enrollment Demand Study

This study of regional higher education enrollment demand and physical capacity for the California Community Colleges and the California State University (CSU) was an information item in October. It responds to a concern raised by educators and legislators regarding the adequacy of the State's higher education physical capacity in accommodating regional undergraduate demand through year 2010. A principal finding throughout the report is that enrollment demand, and capacity pressures resulting from it, will be significant in nearly all geographic regions of the state.

In the October discussion, two substantive recommendations emerged:

1. Regional enrollment demand, projected through 2010, should be compared against current physical capacity figures, rather than compared against proposed capacity estimates contained in the 2001 Five-Year Capital Outlay Plans of the CSU and the community colleges. This was based on the realization that future capacity estimates tend to be unreliable, because capital priorities change frequently, based on the fiscal health of California's economy and on the willingness of voters to pass the necessary general obligation bond measures. Staff revised its capacity tables and analyses accordingly.

2. The regional enrollment demand study should make explicit mention of the institutional initiatives, such as distance/distributed learning, that are intended to increase capacity without necessarily constructing new facilities. The final chapter of this report, titled *The Road Ahead*, now outlines four such initiatives and recommends that a statewide capacity task force be appointed to monitor for the desired outcomes and consequences.

Recommended action: Committee approval and Commission adoption of the report for appropriate action.

Presenter: Stacy Wilson.

December 4, 2001, Draft

REGIONAL HIGHER EDUCATION ENROLLMENT DEMAND STUDY

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1303 J Street ◆ Suite 500 ◆ Sacramento, California 95814-2938

Contents

Displays

1 Executive Summary

THIS REPORT responds to concerns raised by educators and legislators regarding the adequacy of the California's higher education physical capacity in accommodating regional undergraduate demand. Until now, no other state-level or regional planning agency has attempted to develop regional enrollment demand projections covering the entire state. Using 11 geographic planning regions, this report provides a comprehensive analysis of regional undergraduate demand and physical capacity for the California Community Colleges and the California State University (CSU). The analyses shows that enrollment demand will be significant in all regions of the state, fueled principally by regional demographics, local labor market demand, and K-12 reform efforts in schooling.

A similar regional analysis for the University of California will be developed in the near future. The Commission also intends to consult with the Association of Independent California Colleges and Universities (AICCU) to determine how the present model could be expanded reliably to assess regional undergraduate demand and physical capacity requirements for California's independent higher education sector. Once those two studies have been undertaken, the State will have a complete regional higher education demand model that should enhance statewide strategic planning appreciably.

The Commission's 2001 *Baseline Forecast* reflects modest improvements in regional college-going rates, whereas the *Low Alternative Forecast* holds all college-going rates constant at Fall 1999 observed levels. The current lecture and laboratory physical capacity of the California State University and the California Community Colleges was converted to Full-time Equivalent Students (FTES) by the systems, based on the State's adopted space and utilization standards. Staff reviewed each system's 2001 Five-Year Capital Outlay Plan to assess the capital construction projects planned over the next six years and the desired increase in FTES capacity supported by those plans.

As revealed by the Baseline analysis in Display 1, substantial capacity deficits are anticipated in all 11 community college regions, which translate to a 315,058 FTES capacity deficit by year 2010. The space deficits result because of the 30-percent increase in undergraduate demand projected over the next 10 years. Even if current community-college-going rates were to remain constant, as reflected by the Commission's *Low Alternative Forecast* contained in Appendix A, fairly substantial capacity deficits would still remain in nine of the 11 regions, which would translate to a capacity deficit of 156,467 FTES.

DISPLAY 1 Community College Enrollment Demand and Capacity Analysis, by Region, 2004-05 and 2010-11, CPEC 2001 Baseline Forecast

		Fall 2004		Fall 2010	
	FTES Capacity Fall 1999	**Projected FTES Demand**	**FTES Capacity Surplus or Deficit**	**Projected FTES Demand**	**FTESCapacity Surplus or Deficit**
REGION					
Northern California	29,682	36,434	-6,752	40,559	-10,877
Sacramento Area	36,198	61,193	-24,995	72,622	-36,424
San Francisco Bay Area	207,589	228,821	-21,232	256,166	-48,577
North Central Valley	28,097	36,630	-8,533	43,892	-15,795
South Central Valley	44,804	50,939	-6,135	61,089	-16,285
Central Coast	18,397	26,921	-8,524	33,037	-14,640
South Coast	45,027	53,120	-8,093	60,633	-15,606
Los Angeles County	246,809	233,474	13,335	284,840	-38,031
Orange County	102,280	113,448	-11,168	133,557	-31,277
San Bernardino/Riverside	57,384	75,044	-17,660	95,858	-38,474
San Diego/Imperial	80,890	111,843	-30,953	129,962	-49,072
STATE TOTAL	897,157	1,027,867	-130,710	1,212,215	-315,058

Note: FTES Capacity derived by applying State adopted space standards to the assignable square feet of classroom and laboratory space available in each region as of Fall 1999.

FTES Enrollment Projections derived by multiplying the CPEC regional headcount projections by the ratio of average weekly student contact hours (8.8) to the number of hours considered equivalent to one full-time student for budget purposes.

The California Community Colleges Chancellor's Office most recent five-year capital outlay plan, as shown in Display 2, anticipates that about 677,000 assignable square feet (ASF) of lecture space and 2.9 million ASF of laboratory space will be needed by Fall 2006 to accommodate new student demand. Based on the State's space and utilization standards, 677,000 ASF of lecture space would support about 105,160 additional full-time students. The planned 2.9 million ASF of laboratory space would support about 1.1 million additional weekly student contact hours of laboratory instruction, or 75,000 FTES. Even if all the proposed renovation and modernization projects proposed are authorized, the Commission's regional forecast indicates that a 135,000 FTES capacity deficit would still remain by Fall 2010.

DISPLAY 2 *Title 5 ASF Space Needs Reported in the Community Colleges Chancellor's Office 2001 Five-Year Capital Outlay Plan*

Title 5 Category	Total ASF Needed		
	Current Deficiency	ASF to Support Enrollment Growth	Total
Lecture	191,000	486,000	677,000
Laboratory	1,464,000	1,520,000	2,984,000
Office	581,000	415,000	996,000
Library	1,610,000	403,000	2,013,000
AV/TV	439,000	45,000	484,000
Other	2,546,000	2,083,000	4,629,000
TOTAL	6,831,000	4,952,000	11,783,000

For the California State University, capacity deficits are anticipated in nine of the 11 regions by Fall 2004 if the system's current physical plant is not expanded appreciably. By year 2010, as presented in Display 3, capacity pressures would translate to a net –88,858 FTES capacity deficit. The capacity strains are tied to the 37 percent increase in CSU undergraduate demand projected over the next nine years. If regional freshman and community college transfer rates were to remain constant, as depicted in by the Commission's *Low Alternative Forecast*, shown in Appendix B, substantial space deficits would still occur, due mostly to demographic growth.

The State University's 2001 Five-Year Capital Improvement Plan seeks funding to provide for, among many other purposes, approximately 41,000 additional FTES capacity over the next five years. The plan is very detailed and provides cost estimates for five funding categories: *acquisition, preliminary plans, working drawings, construction, and equipment.* Even if the additional capacity is funded, the Commission's analysis indicates that significant capacity deficits would remain by Fall 2010.

It must be noted that the regional capacity analysis contained in this report is intended to suggest an order of *deficit/surplus* magnitude, as opposed to a definitive indication of future capital outlay needs and requirements. This is because in addition to the demographic and economic determinates of demand, the Commission's regional enrollment demand estimates are also influenced by the enrollment preferences and patterns (i.e., regional place-bound rates) presently exhibited by entering freshmen and transfer students. Such student choices will undoubtedly change somewhat over time as new campus facilities and off-campus centers are made available throughout various regions of the state, and as regional

DISPLAY 3 California State University Institutional Capacity Analysis by Region, 2004-05 & 2010-11, CPEC Regional Baseline Forecast

		Fall 2004		Fall 2010	
	FTES Capacity 2000-01	Projected FTES Demand	FTES Capacity Surplus or Deficit	Projected FTES Demand	FTESCapacity Surplus or Deficit
REGION					
Northern California	20,387	21,804	-1,417	25,733	-5,346
Sacramento Area	20,776	22,363	-1,587	27,350	-6,574
San Francisco Bay Area	57,864	62,417	-4,553	74,929	-17,065
North Central Valley	5,241	6,471	-1,230	7,894	-2,653
South Central Valley	21,687	22,006	-319	27,062	-5,375
Central Coast	4,010	2,506	1,504	3,017	993
South Coast	17,672	14,675	2,997	17,582	90
Los Angeles County	83,299	88,646	-5,347	106,856	-23,557
Orange County	20,293	25,428	-5,135	31,350	-11,057
San Bernardino/Riverside	12,284	12,808	-524	16,109	-3,825
San Diego/Imperial	29,556	36,243	-6,687	44,045	-14,489
STATE TOTAL	293,069	315,367	-22,298	381,927	-88,858

Note: Capacity figures include projects that are funded in the current 2001-02 budget (2,988 FTES), plus capacities for CPEC-approved permanent off-campus centers and for CSU Channel that is in transition.

FTES Enrollment Projections derived by multiplying the CPEC regional headcount projections by the ratio of Fall 2000 FTES to Fall student headcount.

enrollment management practices are put in practice. Different regional enrollment preferences of students, and different CSU regional policies, will necessarily imply different capacity needs and requirements.

Finally, it must be understood that although each higher education system produces an annual five-year projection of its capital needs, which was used by the Commission in its capacity analyses, those plans often change as the vagaries of funding and revenue availability are taken into account, and as projects are accordingly pushed either back or ahead due to funding changes, not to mention other factors that may come into play. Aside from the inherent research limitations just referenced, staff believes that the information and analysis provided in this report will assist educational planners and public officials in making reasonably informed assertions about the adequacy of higher education facilities in accommodating regional undergraduate demand for the California Community Colleges and the California State University.

2 A Framework for Modeling Regional Enrollment Demand and Institutional Capacity

Introduction

In Providing for Progress (CPEC 00-1), the Commission arrived at a number of pressing conclusions, including that: (1) California would need to prepare for approximately 714,000 additional students at its public colleges and universities by year 2010, (2) over 78,000 additional students would likely seek access to one of the 75 degree-granting independent institutions, (3) without building new public higher education facilities, while also using existing ones more strategically, the State would be unable to accommodate all of the anticipated increases in student demand, and (4) California will need to seek taxpayer approval of general obligation bonds to help finance an estimated annual capital outlay budget of about $1.5 billion for each of the next 10 years to maintain and expand the State's higher education enterprise to meet enrollment growth.

This regional study covers the nine-year period 2001 to 2010, and it is intended to complement and build on the Commission's statewide forecast of undergraduate demand. The report provides a comprehensive, though preliminary, analysis of regional undergraduate demand and physical capacity for the California Community Colleges and the California State University (CSU), based on eleven geographic planning regions. It was developed in response to a growing concern among educators and legislators to obtain projection data that could be used to assess the adequacy of the State's higher education physical capacity in accommodating the anticipated growth in undergraduate demand on a regional basis.

Both the community colleges and the CSU campuses are engaged in regional planning efforts. However, no state-level or regional planning agency has attempted to develop comprehensive enrollment demand and institutional capacity projections on a statewide regional basis for public colleges and universities. In addition to the information needs of public officials, the study was undertaken for two reasons. First, it is intended to add a degree of clarity to the Commission's statewide forecast by discussing significant regional factors that influence demand. Those factors include California's regional demographics, economies, labor and industrial markets, local land-use policies, and student academic preparation of local K-12 districts.

Second, the regional study can help shed light on what has been described in previous Commission planning reports as the *mismatch problem*. Mismatches occur, because although California's space standards may indicate a given capacity level, that capacity may be compromised or over estimated if facilities are not situated optimally with respect to regional demand, or if they are sized or equipped in a manner that renders them less useful than perhaps originally intended. As will be demonstrated in this report, some regional districts have considerable surplus of space, whereas other areas face considerable deficits.

It must be noted that *systemwide* regional planning (e.g., the CSU system, the community colleges system) is not necessarily the same as *statewide* regional planning, although it is imperative that both planning frameworks complement one another. That is, systemwide regional planning tends to be more microscopic and addresses strategic issues pertinent to a particular system, or to a specific locality within a system. Statewide regional planning, however, is necessarily macroscopic in practice and is guided by a keen interest to promote cost-effective institutional arrangements across systems that best maximize student choice and access at the regional level while also furthering broader statewide undergraduate aims and purposes. Such a planning process, naturally, must embrace an open and vibrant consultative forum to ensure that important regional issues and concerns of the California Community Colleges, the State University, the University of California, and the independent college and university sector in the state are made explicit in statewide planning.

To illustrate, recent CSU systemwide policy guarantees admission at a regional campus to all qualified freshmen and community-college transfer applicants residing in the region. This means that some impacted CSU campuses, such as San Diego and San Luis Obispo, may need to redirect the applications of qualified out-of-region prospective students in order to manage their respective enrollment growth. From a statewide regional perspective, it would be important to alert public officials that the undergraduate demand for those two regional campuses is actually greater than that implied by each campuses' participation rate. It also would be necessary for the Commission to examine carefully the demographic characteristics of both *within-region* and *out-of-region* applicants to ensure that the systemwide policy does not adversely impact the State's broad goal of access and ethnic/socioeconomic diversity.

Purpose of the study

In addition to estimating undergraduate demand and institutional capacity, the Commission's regional planning efforts have three broad goals:

1. More clearly define the limitations and opportunities of expanding the California's higher education enterprise regionally to accommodate undergraduate demand.

2. Address key regional policy issues raised by various educational constituency groups and legislative entities.

3. Compile useful regional demographic, socioeconomic and labor market information that could be used by institutions to support their local regional planning efforts.

Commission staff intends to provide every State University and community college Institutional Research Office with this report to help assess the extent to which the information is useful for diverse institutional planning purposes. Eventually, staff will develop thematic regional maps to accentuate relationships between regional enrollment demand and selected demographic, economic, and labor market attributes. Discussions have been initiated with the University of California (UC) and with the Association of Independent California colleges and universities to determine how the present model could be expanded or modified to assess regional undergraduate demand and physical capacity requirements for the UC and for California's significant independent higher education sector.

Overview of the eleven geographic planning regions

Defining regions for statewide planning purposes is not a clear-cut process because no single regional typology or county clustering schema can address all relevant regional issues and concerns. It may also be argued that regions should be formed below the county level in order to account for local commute and transportation patterns, local industrial composition, local demographics, and differences in local K-12 schooling outcomes. Most key educational and economic data, however, are not collected or projected at a more local level than the *county*. This situation necessitates defining educational regions as aggregations of counties, even when county boundaries do not precisely define an educational area. The regional schema adopted in this study is not without justification.

California is often categorized generally according to six major topographical areas for various regional planning purposes: Northern California, Sacramento Valley Area, Central San Joaquin Valley, Coastal Areas, Southern California, and the Eastern Sierra Nevada Mountain Areas. In order to develop useful regional enrollment demand projections, the Commission felt that more discrimination by topographical area was needed. As shown by Display 4, the state has been subdivided into 11 rather than six geographic regions. Because the geographic boundaries are the same as those used in the Commission's *Eligibility Study of Public High School Graduates*, it was possible to relate and examine changes in regional college participation to changes in student academic preparation and college eligibility.

In the Southern California area, Orange County and Los Angeles County are each defined as self-encompassing regions. For the past 40 years, the U. S. Census Bureau has also treated those two counties as separate metropolitan statistical areas when collecting annual socioeconomic data for its *Current Population Surveys* (CPS). CPS data indicate that the two counties have different socioeconomic compositions. For example, Los Angeles County, the nation's largest metropolitan area, is more ethnically diverse than Orange County, and it has a much more sizable foreign-born

population. With respect to affluence, average personal income in Los Angeles County is about 22 percent lower than it is in Orange County.

The remaining areas of Southern California have been clustered together to form two additional regions: San Bernardino County, the area that is projected to experience the largest population growth, has been combined with neighboring Riverside county, and San Diego and Imperial counties have been combined to form the other southern region.

California's central valley has been subdivided into three primary regions. The most northern portion of the valley is referred to as the Sacramento Valley Area. It consists of Yolo and Sacramento counties to the west, and Placer and El Dorado counties to the east.

Just below the Sacramento Area is the region referred to as the Northern Central Valley. It includes San Joaquin, Stanislaus, Merced and Madera counties, as well as the Sierra Nevada mountains located to the east in Alpine and Mono counties.

The remainder the valley area is labeled the Southern Central Valley. It consists of five counties, with Fresno and Inyo counties bordering the northwest and northeast, respectively, and Kings and Kern counties to the west and south, while Tulare county sits in the center of the region. Over the past several decades, college eligibility and participation has been substantially higher in the Sacramento Area Region than it has been throughout the rest of the central valley. Thus, to treat the entire valley as one unifying region would be to mask important differences in socioeconomic makeup and college preparation that presently exists.

The central and southern costal areas have been subdivided into three regions. One area, called the San Francisco Bay Area Region, consists of the traditional nine Bay Area counties that are often treated as a unifying region by various planning agencies, such as the Bay Area Association of Governments (ABAG). In this region, Sonoma, Marin, San Francisco, and San Mateo counties are located on the west side of the San Francisco Bay, while Napa, Solano, Contra Costa, Alameda, and Santa Clara counties border the east side of the bay. Just below this region is the area, referred to as the Central Coast, that includes Santa Cruz County to the northwest, Monterey County bordering the west and south, and San Benito County to the east. The remaining costal area is referred to as the South Coast and includes San Luis Obispo, Santa Barbara, and Ventura counties.

Finally, the most northern portion of the state is referred to as the Northern Region. It stretches from Del Norte County in the northwest corner of the state, to Modoc County in the northeast corner, and down to Nevada and Mendocino counties in the southeast and southwest corners, respectively. Unlike the rest of the state, the Northern Region is not expected to experience a tidal wave of high school graduates over the next 10 years. In fact, the most recent projections released by the Department

of Finance indicate that the number of public high school graduates in this region will actually decline by about five percent by year 2010.

DISPLAY 4 Listing of CSU and UC Campuses, Community Colleges Districts, and the 58 California Counties by Region

Counties Grouped By Region	University of California Campus	California State University	California Community College Districts
Northern California			
Butte		Chico State U.	Butte-Glenn CCD
Colusa			
Del Norte			
Glenn			
Humboldt		Humboldt State U	Redwoods CCD
Lake			
Lassen			Lassen CCD
Mendocino			Mendocino-Lake CCD
Modoc			
Nevada			
Plumas			Feather River CCD
Shasta			Shasta-Tehama-Trinity CCD
Sierra			
Siskiyou			
Sutter			Siskiyou Joint CCD
Tehama			
Trinity			
Yuba			
			Yuba CCD
Sacramento Area			
El Dorado			Lake Tahoe CCD
Placer			Sierra Joint CCD
Sacramento		CSU, Sacramento	Los Rios CCD
Yolo	UC, Davis		
San Fran. Bay Area			
Alameda	UC, Berkeley	CSU, Hayward	Chabot-Las Positas CCD
			Fremont-Newark CCD
			Peralta CCD
Contra Costa			Contra Costa CCD
Marin			Marin CCD
Napa			Napa Valley CCD
San Francisco	UC, San Francisco	San Fran. State U.	San Francisco CCD
San Mateo			San Matea County CCD
Santa Clara		San Jose State U.	Foothill-De Anza CCD
			Gavilan Joint CCD
			San Jose-Evergreen CCD
			West Valley-Mission CCD
Solano		Calif. Mar. Acad.	Solano CCD
Sonoma		Sonoma State U.	Sonoma CCD

DISPLAY 4 Continued

Counties Grouped By Region	University of California Campus	California State University	California Community College Districts
North. Central Valley			
Alpine			
Amador			
Calaveras			
Madera			
Mariposa			
Merced	UC, Merced		Merced CCD
Mono			
San Joaquin			
Stanislaus		CSU, Stanislaus	San Joaquin Delta CCD Yosemite CCD
Tuolumne			
South. Central Valley			
Fresno		CSU, Fresno	State Center CCD West Hills CCD
Inyo			
Kern		CSU, Bakerfield	Kern CCD West Kern CCD Sequoias CCD
Kings			
Tulare			
Central Coast			
Monterey		CSU, Monterey Bay	Hartnell CCD Monterey Peninsula CCD
San Benito			
Santa Cruz	UC, Santa Cruz		Cabrillo CCD
South Coast			
San Luis Obispo		Cal Poly, SLO	San Luis Obispo County CCD
Santa Barbara	UC, Santa Barbara		Allan Hancock CCD Santa Barbara County CCD
Ventura		CSU, Channel Islands	Ventura County CCD

DISPLAY 4 Continued

Counties Grouped By Region	**University of California Campus**	**California State University**	**California Community College Districts**
Los Angeles County Los Angeles	UC, Los Angeles	Cal Poly, Pomona CSU, Dominguez Hill CSU, Long Beach CSU, Los Angeles CSU, Northridge	Antelope Valley CCD Cerritos CCD Citrus CCD Compton CCD El Camino CCD Glendale CCD Long Beach CCD Los Angeles CCD Mt. San Antonio CCD Pasadena Area CCD Rio Hondo CCD Santa Clarita CCD Santa Monica CCD
Orange County Orange County	UC, Irvine	CSU, Fullerton	Coast CCD North Orange County CCD Rancho Santiago CCD South Orange County CCD
San Bern./Riverside Riverside San Bernardino	UC, Riverside	CSU, San Bernardino	Desert CCD Mt. San Jacinto CCD Palo Verde CCD Riverside CCD Barstow CCD Chaffey CCD San Bernardino CCD Victor Valley CCD
San Diego/Imperial Imperial San Diego	UC, San Diego	San Diego State U. CSU, San Marcos	Imperial CCD Grossmont-Cuyamaca CCD Mira Costa CCD Palomar CCD San Diego CCD Southwestern CCD
11 Regions/58 Counties	10 UC Campues	23 CSU Campuses	71 CC Districts

Methodology for estimating regional physical capacity

Questions regarding the amount of physical capacity needed on a regional basis for student learning and instruction were originally thought to be answerable indirectly through the adopted State standards. This was because policymakers of the post World War II era argued that enrollment capacity in higher education should be determine by the availability and usage of classrooms and teaching laboratories alone, and therefore, space standards needed to be crafted and adopted. Such thinking was guided by the assumption that virtually all instruction would take place in those facilities, and that other needs of the physical plant, such as space for administration and plant maintenance, would be built as circumstances dictated. The standards, which were last revised during the 1970s, entail certain assumptions about reasonable room size, hourly usage, and occupancy levels for classrooms, teaching laboratories, and faculty offices.

Other types of facility space, termed *non-capacity space*, include facilities such as museums, observatories, cultural centers, hospitals, theatres, student unions, auditoria, dormitories, auto shops, and childcare centers. Because those facilities are quite varied and unique, it would be difficult to apply a common capacity standard. Thus, it is possible that an institution may have adequate classrooms and teaching laboratories, yet be unable to add any additional students due to a lack of support facilities, unless of course, good prior planning has produced a balanced physical plant. Classrooms and teaching laboratories account for about 40 percent of the approximately 39.4 million square feet of total space for California's community colleges, whereas those same two types of facilities occupy a quarter of the approximately 27.8 million assignable square feet of the California State University.

In order to determine the current physical capacity of classrooms and teaching laboratories on a regional basis for the California Community Colleges and the California State University, it was necessary to adopt a standard measure of institutional space and full-time equivalent student (FTES). In *Providing for Progress*, physical capacity was expressed in terms of Weekly Student Contact Hours (WSCH). The expression measures the number of hours students are scheduled for lecture and laboratory courses and is converted easily to FTES. A similar approach was used in this study. That is, the amount of instructional spaces available at a campus was converted to WSCH and FTES, based on the State standards, and then summed to a regional total.

Display 5 shows the space and utilization standards for lecture classrooms. With but a few exceptions, the standards call for lecture classrooms to be in use 53 hours per week, out of a total possible usage of 70 hours (i.e., 8 a.m. to 10 p.m., Monday through Friday), and that each student station average 15 Assignable Square Feet (ASF) and be occupied approximately 66 percent of the time. This translates to 35 weekly station hours per lecture student station (i.e., 53*.66=35). Because the standards provide for 15 ASF per station, this value can be divided by weekly station hours per station (35) to derive a lecture capacity of .429 ASF per

weekly station hour, or alternately, 2.331 WSCH per ASF. Thus, 100 ASF of lecture space, as illustrated by column 6 of Display 4, would yield a lecture capacity of 233.1 Weekly Student Contact Hours. Because a full-time equivalent student is defined as 15 WSCH for undergraduate instruction, dividing 233.1 by 15 WSCH translates to 15.54 FTES generated by 100 ASF of lecture space.

DISPLAY 5 State Adopted Space and Utilization Standards for Lecture Classrooms

Weekly Room Hours	Station Occupancy	Weekly Station Hrs.	ASF Per Station	WSCH per ASF	WSCH per 100 ASF	FTES Capacity Per 100 ASF
53 Hrs.	66%	35 Hrs.	15 ASF	2.331 WSCH	233.1 WSCH	15.54 FTES

For teaching laboratories, the standards call for various levels of ASF per student station, depending on the discipline and the course level (lower and upper division, graduate). For example, the standards provide for 80 ASF per student station for an upper-division Fine Arts course taught at the CSU, whereas 60 ASF per station is the standard for a lower-division Fine Arts course. Display 6 shows all of the discipline-specific State space standards for laboratory instruction at the CSU, and Display 7 shows the same information for the community colleges.

DISPLAY 6 State Space Standards for Instructional Laboratories at the California State University

	Assignable Square Feet per Station	
Discipline	Lower Division	Upper Division
Agriculture	60	60
Anthropology	42.5	45
Architecture	40	65
Area Studies	30	30
Art	65	65
Biological Science	55	60
Broadcast Communication Art	30	60
Business Admin. & Econ.	30	30
Communications	30	30
Computer Science	49	49
Education	--	40
Engineering, Other	90	110
Fine Arts	60	80
Foreign Languages	40	40
Geography	42.5	45
Health Professions	40	50
Health Science	--	50.0
Home Economics	60	60
Humanities, General	40	40
Industrial Arts	68	82.7
Journalism	60	60
Mathematics	30	30
Physical Education	40	50
Physical Science	60	70
Psychology	40	60
Public Administration	30	30
Social Sciences, General	30	30

DISPLAY 7 State Space Standards for Instructional Laboratories at the California Community Colleges

Discipline	Assignable Squares Feet per Station (Lower Division)
Agriculture	115
Air Conditioning	130
Architecture	60
Auto-Body & Fender	200
Auto-Mechanic	200
Auto-Technology	75
Aviation Maintenance	175
Biological Science	55
Business and Management	30
Carpentry	175
Commercial Services	50
Communications	50
Computer and Information Science	40
Diesel	200
Dry-Wall	175
Education	75
Electricity	175
Engineering	75
Fine and Applied Arts	60
Foreign Language	35
Glazing	175
Graphic Arts	80
Health Services	50
Heavy Equipment	200
Home Economics	60
Interdisciplinary	60
Letters	35
Library Science	35
Machine Tools	90
Masonry	175
Mathematics	35
Metal Trades	90
Millwork	90
Painting	175
Physical Sciences	60
Plastering	175
Plastics	130
Plumbing	175
Psychology	35
Public Affairs and Service	50
Refrigeration	130
Roofing	175
Small Engine Repair	100
Social Sciences	35
Stationary Engine	200
Welding	90

Methodology for assessing regional classroom and laboratory capacity of the California Community Colleges

Every year, each community college district submits a comprehensive five-year plan to the Chancellor's Office in Sacramento that contains information about the physical plant of the campuses and off-campus centers located in the district. The Chancellor's Office evaluates, amends, and prioritizes those plans and submits a report to its Board of Governors. The Commission reviewed the Chancellor's Office 2001 Five-Year Capital Outlay Plan to determine how much classroom and laboratory space was available to conduct instructional programs, and to determine future plans for capital construction and the associated costs. The current capacity of the system was estimated by converting all identified assignable square feet of lecture and laboratory space within a district to Weekly Student Contact Hours and FTES, based on the State space standards, and then summing the figures across districts to derive regional capacity as of Fall 1999.

To assess and make informed judgments about the future capacity needs of the system, the Commission's regional enrollment demand projections were converted to FTES, based on a correction factor of .588, and compared against the current regional capacity estimates. The correction factor is based on the assumption that *student unit load* would continue to average 8.8 credit units per semester. Because a full-time equivalent is defined as a unit load of 15 credit units per semester, dividing 8.8 by 15 yields the identified correction value for converting student headcount projections to FTES projections.

Methodology for assessing regional classroom and laboratory capacity of the California State University

Various sources were used to assess the future capacity needs of the State University on a regional basis; including, its 2001 five-year capital improvement plan, and data contained in its systemwide Space and Facilities Database. The Facilities Database contains projected capacity numbers through 2006-07. It includes not only FTES, but also additional FTES enrollments from on-site and off-site Other Earned Enrollment categories. The Other Earned enrollment category consists of FTES generated outside of classrooms and laboratories, either on or off campus. Such FTES credits may stem from televised courses, individual study, teacher education field work, or credits generated in self-paced computer laboratories through the use of packaged, interactive computer programs.

The current regional capacities of the CSU were determined by aggregating campus classroom and laboratory space figures for the academic year 2001-02 to regional totals. The figures were provided by the CSU and include projects funded in the 2001-02 capital outlay budget, as well as capacities for CPEC-approved permanent off-campus centers and for CSU Channel Islands, which is in transition. To assess and make informed judgments about the future capacity needs of the CSU, the Commission's regional enrollment demand projections were converted to FTES based on a correction factor of .83725, and then compared against the current regional capacity estimates. The correction factor represents the ratio of Fall 2000 undergraduate FTES to Fall 2000 undergraduate student headcount.

Methodology for estimating undergraduate regional enrollment demand

Overview of the Commission's model

The Commission's regional enrollment demand model, like its statewide projection model, can be characterized best as a *bottom-up* approach to modeling. With respect to four-year public universities, the bottom-up approach is based on the premise that the majority of undergraduate students that will be enrolled in public institutions in year 2010 in various regions have not yet begun college. Because most University of California undergraduates either graduate or leave permanently within seven years, the University's regional enrollments in year 2010 would consist of all continuing students who are projected to first begin matriculating in year 2003 or later as either first-time freshmen or transfer students. As noted, regional undergraduate demand estimates for UC will be developed in the near future.

Because the California State University enrolls significant numbers of part-time students, many of whom are working adults, and because the majority of State University students usually graduate or leave permanently within eight years, its regional enrollments in 2010 will consist mainly of all continuing students who are projected to first begin matriculating in 2002 or later as either first-time freshmen or first-time transfer students. After the CSU first-time freshman and transfer headcounts were projected, the numbers were used in a series of regional life tables to simulate the likely enrollment life span of freshman and transfer students from entry to final departure. The life tables reflect the most current continuation, attrition, and graduation data available.

Estimating CSU first-time freshmen by region

As a first step in the regional projection process, it was necessary to derive and examine three specific types of freshman participation rates. One rate, called the *mean regional participation rate*, represents the proportion of public high school graduates from a particular region that enrolled subsequently at any CSU campus as a first-time freshman. Another rate, called the *within-region participation rate*, represents the percentage of first-time freshmen of a particular region that enrolled at a CSU campus located in the same region as their high school. The rate is sometimes referred to as a *place-bound* rate. The place-bound rate, though, does not necessarily mean that students live at home while enrolled in college. Rather, it has been used to signify the proportion of entering college students that tend to enroll at a CSU within reasonable proximity of their home.

The third rate tracked by the Commission is referred to as the *out-of-region* participation rate. It represents the proportion of public high school graduates that have historically enrolled at a CSU campus in a region different from their high school location. Once the three types of participation rates were projected, as discussed in Chapter 4, they were applied to the Department of Finances projections of public high school graduates to derive numerical headcounts. It was assumed that students from private California High Schools, out-of-state high schools, and foreign secondary schools, would continue to account for about 16 percent of total CSU first-time freshman. The freshman projections were used in

series of regional *life tables* to simulate the likely enrollment life span of CSU freshman from entry to final departure, based on current continuation, graduation, and attritions rates.

To estimate CSU community college transfer demand, staff first examined historical *within-region* and *out-region* transfer participation rates by age-group. The *within-region* rate represents the proportion of community college students of a particular region and age group that transferred to CSU campus in the same region as their community college. The *out-region* rate represents the proportion of community college students of a particular region and age-group that transferred to a CSU campus in a region different from their community college.

To derive a *Baseline Forecast*, analytic judgments were made concerning the rate of improvement in student transfer that various regions can reasonably expect to experience over the projection period. Those judgments were based in part on recent trends in CSU transfer enrollments and the anticipated effects of outreach programs that have been established in certain regions to improve transfer readiness. Once projected, the transfer rates were applied to the Commission's baseline forecast of regional community college demand to obtain numerical headcount projections of CSU first-time transfer students. As a final step, those numerical projections were used in series of regional *life tables* to simulate the likely enrollment life span of CSU community college transfers from entry to final departure

Estimating community college enrollment demand by region

Because most community college students attend an institution in the same region as their home, it was not necessary to calculate *within region* and *out-region* participation rates. Instead, staff analyzed regional community college enrollments by five primary age groups (18-19, 20-24, 25-29, 30-49, 50-59) and derived a mean regional participation rate for each age group. The rate represents the proportion of Californians of a particular region and age group that were enrolled at a community college during a given Fall Semester. To derive the *Baseline Forecast*, analytic judgments were made concerning the rate of improvement in age-specific participation that various community college regions could reasonably expect to experience over the projection period. The Low Alternative Forecast held all enrollment rates constant at the Fall 1999 observed levels. Once, the baseline and low alternative rates were derived, they were applied to the Department of Finance's California population projections by county, which were then summed by the Commission to the regional level.

3 Analysis of Regional Institutional Capacity

The California Community Colleges

The need for capital outlay resources will remain great over the nine years for the system of California Community Colleges, as its regional campuses struggle and strain to accommodate an anticipated 30 percent increase in enrollment demand. As shown by Display 8 (same as Display 1 in Executive Summary), substantial capacity deficits are anticipated in all eleven community college regions, which translate to a –315,058 FTES capacity deficit by year 2010. The space deficits result because of the projected 30 percent increase in enrollment demand over the next nine years. Even if current community college-going rates were to remain constant, as reflected by the Commission's *Low Alternative Forecast* contained in Appendix A, a –156,467 FTES capacity deficit would still remain.

DISPLAY 8 Community Colleges Enrollment Demand and Capacity Analysis, by Region, 2004-05 and 2010-11, CPEC 2001 Baseline Forecast

		Fall 2004		Fall 2010	
	FTES Capacity Fall 1999	Projected FTES Demand	FTES Capacity Surplus or Deficit	Projected FTES Demand	FTESCapacity Surplus or Deficit
REGION					
Northern California	29,682	36,434	-6,752	40,559	-10,877
Sacramento Area	36,198	61,193	-24,995	72,622	-36,424
San Francisco Bay Area	207,589	228,821	-21,232	256,166	-48,577
North Central Valley	28,097	36,630	-8,533	43,892	-15,795
South Central Valley	44,804	50,939	-6,135	61,089	-16,285
Central Coast	18,397	26,921	-8,524	33,037	-14,640
South Coast	45,027	53,120	-8,093	60,633	-15,606
Los Angeles County	246,809	233,474	13,335	284,840	-38,031
Orange County	102,280	113,448	-11,168	133,557	-31,277
San Bernardino/Riverside	57,384	75,044	-17,660	95,858	-38,474
San Diego/Imperial	80,890	111,843	-30,953	129,962	-49,072
STATE TOTAL	897,157	1,027,867	-130,710	1,212,215	-315,058

Note: FTES Capacity derived by applying State adopted space standards to the total square feet of classroom and laboratory space projected to be available in each region.

FTES Enrollment Projections derived by multiplying the CPEC regional headcount projections by the ratio of average weekly student contact hours (8.8) to the number of hours considered equivalent to one full-time student for budget purposes.

Recent legislation, Assembly Bill 1473 (Chapter 606, Statutes of 1999), requires the governor, as part of the State Budget process, to submit an annual five-year capital infrastructure plan. To support the budget process, the legislation requires every State agency to provide the Department of Finance with information related to its capital infrastructure needs and associated costs for a five-year period, beginning fiscal year 2002-03. The California Community Colleges Chancellor's Office most recent five-year capital outlay plan, as shown in Display 9 (same as Display 2 in the Executive Summary), anticipates that about 677,000 assignable square feet (ASF) of lecture space and 2.9 million ASF of laboratory space will be needed by Fall 2006 to accommodate new student enrollment demand.

DISPLAY 9 *Title 5 ASF Space Needs Reported in the Community Colleges Chancellor's Office 2001 Five-Year Capital Outlay Plan*

Title 5 Category	Total ASF Needed		
	Current Deficiency	ASF to Support Enrollment Growth	Total
Lecture	191,000	486,000	677,000
Laboratory	1,464,000	1,520,000	2,984,000
Office	581,000	415,000	996,000
Library	1,610,000	403,000	2,013,000
AV/TV	439,000	45,000	484,000
Other	2,546,000	2,083,000	4,629,000
TOTAL	6,831,000	4,952,000	11,783,000

Based on the State's space and utilization standards, 677,000 ASF of lecture space would support about 105,160 additional full-time students. The planned 2.9 million ASF of laboratory space would support about 1.1 million additional weekly student contact hours of laboratory instruction, or 75,000 FTES. Even if all the proposed renovation and modernization projects proposed are authorized by the State, the Commission's regional forecast indicates that a 135,000 FTES capacity deficit would still remain by Fall 2010.

Although staff did not attempt to derive capacity estimates for community college districts within each region, Display 10 is included here to highlight the troublesome mismatch problem discussed previously in this report. The display represents actual capacity and enrollment data for the 1998-99 academic year. As revealed, some districts have significant excess enrollment capacity, while other districts have tremendous need for additional classroom and laboratory space. To take one of many exam-

ples, the San Francisco Bay Area region has excess capacity sufficient for an additional 475 FTES as of 1998-99. However, when examined in depth within the region, it will be noticed that the Peralta District has a surplus of 6,800, whereas the San Francisco Community College District had a 4,159 FTES capacity deficit. Similarly, the San Mateo District a capacity surplus equivalent to 2,618 FTES, whereas the Foothill-De Anza District (Silicon Valley) appears to have a huge need for space to support an additional 4,484 FTES.

It is certain that, in a system of 106 community colleges that serve a statewide population of over 35 million, there will always be a degree of mismatch between population density and the availability of learning facilities. There are, however, at least two planning measures that can be taken to lessen the degree of mismatches. Foremost, is the need to prevent so-called *end-runs* in the community college system, wherein some districts may prevail upon their local legislators to circumvent the Community Colleges Chancellor's Office and attempt to secure funding ahead of priority projects. Funding those local projects could very well worsen the mismatch problem. Second, district-wide regional planning teams should be formed and encouraged to work closely with the Commission and the Demographic Research Unit of the Department of Finance to ensure that capital resource planning is based on the most comprehensive set of relevant data available.

DISPLAY 10 California Community Colleges Institutional Capacity, 1998-99 by Region and District

Region	District	Real FTES Capacity, CPEC Standards	FTES Enrollment	Capacity Surplus or Deficit
Northern California	Butte-Glenn CCD	9,437	10,960	-1,523
	Feather River CCD	1,365	969	396
	Lassen CCD	2,139	2,621	-482
	Mendocino-Lake CCD	2,151	2,553	-402
	Redwoods CCD	N/A	N/A	N/A
	Shasta-Tehama-Trinity CCD	6,530	6,730	-200
	Siskiyou Joint CCD	1,885	2,050	-165
	Yuba CCD	6,175	7,236	-1,061
Subtotal		**29,682**	**33,119**	**-3,437**
Sacramento Area	Lake Tahoe CCD	1,469	1,486	-17
	Los Rios CCD	28,212	35,993	-7,781
	Sierra Joint CCD	6,517	10,595	-4,078
Subtotal		**36,198**	**48,074**	**-11,876**
San Fran. Bay Area	Chabot-Las Positas CCD	13,012	12,935	77
	Contra Costa CCD	23,966	26,530	-2,564
	Foothill-De Anza CCD	23,585	28,069	-4,484
	Fremont-Newark CCD	6,854	6,459	395
	Gavilan Joint CCD	3,876	3,263	613
	Marin CCD	9,782	7,267	2,515
	Napa Valley CCD	5,890	4,873	1,017
	Peralta CCD	21,642	14,842	6,800
	San Francisco CCD	31,367	35,526	-4,159
	San Jose-Evergreen CCD	12,595	10,988	1,607
	San Mateo County CCD	19,276	16,658	2,618
	Solano CCD	7,212	6,933	279
	Sonoma CCD	15,840	18,123	-2,283
	West Valley-Mission CCD	12,692	14,648	-1,956
Subtotal		**207,589**	**207,114**	**475**
North. Central Valley	Merced CCD	5,954	8,050	-2,096
	San Joaquin Delta CCD	11,719	13,676	-1,957
	Yosemite CCD	10,424	13,598	-3,174
Subtotal		**28,097**	**35,324**	**-7,227**
South. Central Valley	Kern CCD	17,807	14,133	3,674
	Sequoias CCD	5,605	7,822	-2,217
	State Center CCD	18,937	19,602	-665
	West Hills CCD	2,455	2,684	-229
	West Kern CCD	N/A	N/A	N/A
Subtotal		**44,804**	**44,241**	**563**
Central Coast	Cabrillo CCD	9,707	9,243	464
	Hartnell CCD	3,900	5,899	-1,999
	Monterey Peninsula CCD	4,790	7,225	-2,435
Subtotal		**18,397**	**22,367**	**-3,970**

DISPLAY 10 Continued

Region	District	Real FTES Capacity, CPEC Standards	FTES En-rollment	Capacity Surplus or Deficit
South Coast	Allan Hancock CCD	5,407	6,758	-1,351
	San Luis Obispo County CCD	6,132	7,190	-1,058
	Santa Barbara County CCD	10,685	12,077	-1,392
	Ventura County CCD	22,803	23,442	-639
Subtotal		**45,027**	**49,467**	**-4,440**
Los Angeles County	Antelope Valley CCD	6,046	7,006	-960
	Cerritos CCD	14,854	13,770	1,084
	Citrus CCD	9,161	8,453	708
	Compton CCD	3,233	4,015	-782
	El Camino CCD	22,443	16,276	6,167
	Glendale CCD	11,035	11,815	-780
	Long Beach CCD	15,043	16,559	-1,516
	Los Angeles CCD	90,698	70,644	20,054
	Mt. San Antonio CCD	20,342	20,344	-2
	Pasadena Area CCD	18,542	17,534	1,008
	Rio Hondo CCD	11,046	8,347	2,699
	Santa Clarita CCD	5,339	5,223	116
	Santa Monica CCD	19,027	20,134	-1,107
Subtotal		**246,809**	**220,120**	**26,689**
Orange County	Coast CCD	35,175	27,656	7,519
	North Orange County CCD	30,945	25,918	5,027
	Rancho Santiago CCD	19,091	25,914	-6,823
	South Orange County CCD	17,069	20,619	-3,550
Subtotal		**102,280**	**100,107**	**2,173**
San Bern./Riverside	Barstow CCD	1,025	1,595	-570
	Chaffey CCD	10,487	12,103	-1,616
	Desert CCD	6,254	6,268	-14
	Mt. San Jacinto CCD	4,672	5,320	-648
	Palo Verde CCD	566	622	-56
	Riverside CCD	12,526	16,326	-3,800
	San Bernardino CCD	16,126	12,531	3,595
	Victor Valley CCD	5,728	6,359	-631
Subtotal		**57,384**	**61,124**	**-3,740**
San Diego/Imperial	Grossmont-Cuyamaca CCD	11,508	15,527	-4,019
	Imperial CCD	4,611	4,627	-16
	Mira Costa CCD	6,579	6,392	187
	Palomar CCD	13,932	17,739	-3,807
	San Diego CCD	34,177	37,597	-3,420
	Southwestern CCD	10,083	10,998	-915
Subtotal		**80,890**	**92,880**	**-11,990**
Grand Total		**897,157**	**913,937**	**-16,780**

Source: Chancellor's Office, California Community Colleges, February 1999 District Five-Year Plans.

California State University

Capacity deficits in CSU classroom and laboratory facilities are anticipated in 9 of the 11 regions by Fall 2004 if the system's current physical plant is not expanded appreciably, or if CSU planners do not continue to discover creative ways to use existing facilities more strategically. In this latter regard, the system is currently expanding year-around operations and evening, weekend, and short-term intensive courses in an effort to maximize use of instructional classrooms. The system also is working diligently to reach more students through distance education and off-campus instructional sites.

DISPLAY 11 California State University Enrollment Demand and Capacity Analysis, by Region, 2004-05 and 2010-11, CPEC 2001 Baseline Forecast

		Fall 2004		Fall 2010	
	FTES Capacity 2001-02	Projected FTES Demand	FTES Capacity Surplus or Deficit	Projected FTES Demand	FTESCapacity Surplus or Deficit
REGION					
Northern California	20,387	21,804	-1,417	25,733	-5,346
Sacramento Area	20,776	22,363	-1,587	27,350	-6,574
San Francisco Bay Area	57,864	62,417	-4,553	74,929	-17,065
North Central Valley	5,241	6,471	-1,230	7,894	-2,653
South Central Valley	21,687	22,006	-319	27,062	-5,375
Central Coast	4,010	2,506	1,504	3,017	993
South Coast	17,672	14,675	2,997	17,582	90
Los Angeles County	83,299	88,646	-5,347	106,856	-23,557
Orange County	20,293	25,428	-5,135	31,350	-11,057
San Bernardino/Riverside	12,284	12,808	-524	16,109	-3,825
San Diego/Imperial	29,556	36,243	-6,687	44,045	-14,489
STATE TOTAL	293,069	315,367	-22,298	381,927	-88,858

Note: Capacity figures include projects that are funded in the current 2001-02 budget (2,988 FTES), plus capacities for CPEC-approved permanent off-campus centers and for CSU Channel that is in transition.

FTES Enrollment Projections derived by multiplying the CPEC regional headcount projections by the ratio of Fall 2000 FTES to Fall student headcount.

By year 2010, as shown in Display 11, capacity pressures would translate to a –88,858 FTES capacity deficit. The capacity strains are tied to the projected 37 percent increase in CSU undergraduate demand over the next nine years. If regional freshman and community college transfer rates were to remain constant, as depicted in the Commission's Low Alternative Forecast (Appendix B), substantial space deficits would still occur due to regional demographic growth.

The State University's 2001 Five-Year Capital Improvement Plan seeks State funding through general obligation bonds to provide for, among many other purposes, approximately 41,000 additional FTES capacity over the next five years. The plan is very detailed and provides cost estimates for five funding categories: *acquisition, preliminary plans, working drawings, construction, and equipment.* The cost estimates are based on the *Engineering News-Record California Building Construction Cost Index*. Even with this additional capacity on hand, the Commission's Baseline Forecast indicates that substantial capacity deficits would remain by 2010.

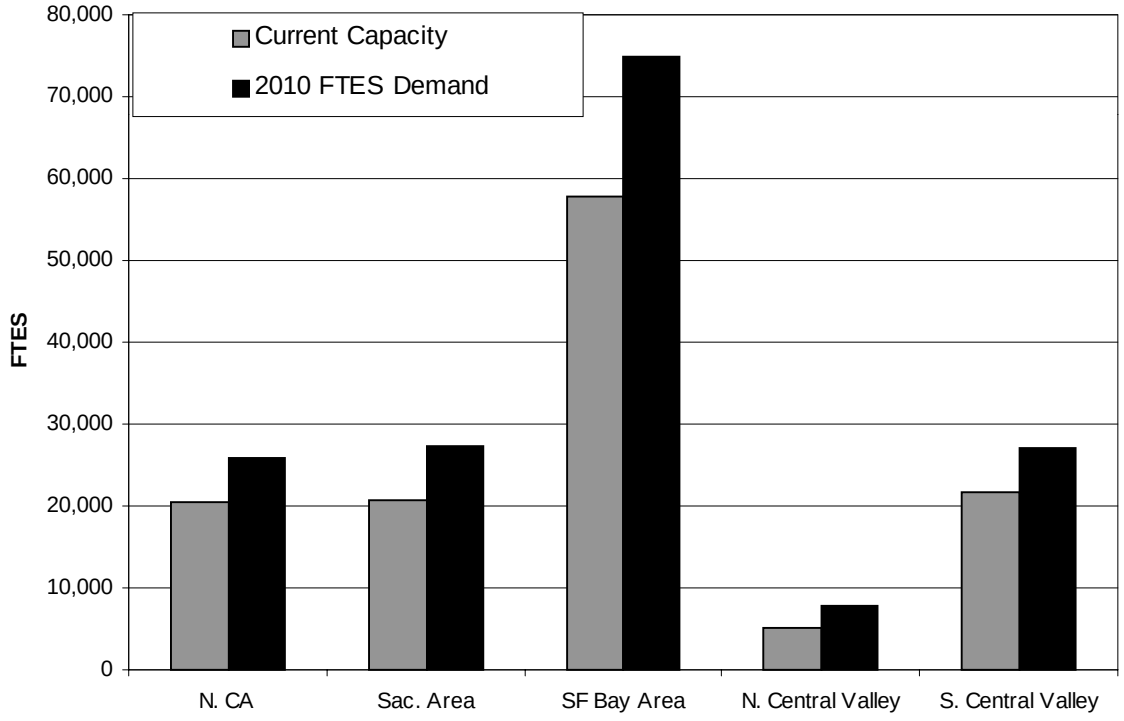
Display 12 provides a graphical representation of projected FTES demand in relation to current FTES capacity. There appear to be five areas of the state that will face exceptional capacity pressures, in that FTES demand is projected to be more than 130 percent of current capacity. Those areas are the Orange County Region (154%), the North Central Valley (150%), the San Diego/Imperial Region (149%), the Sacramento Area Region (132%), and the San Bernardino/Riverside Region (131%).

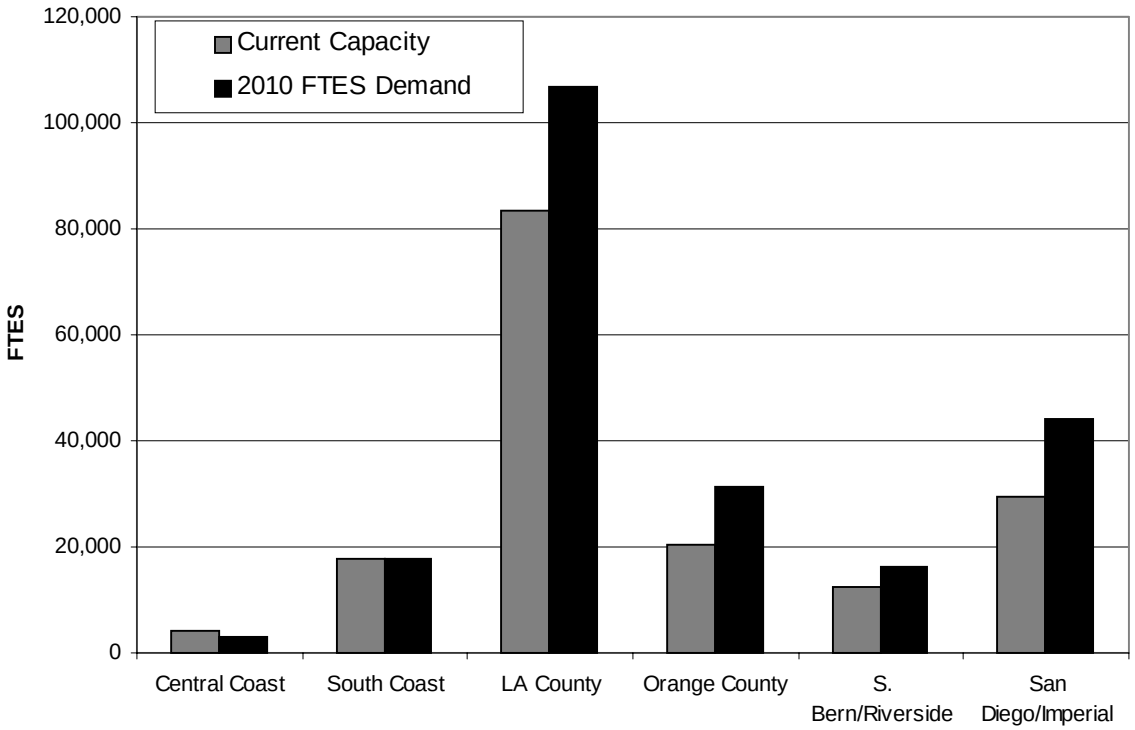
Over the past decade, Orange County has posted one of the highest CSU freshman eligibility and college-going rates, which has contributed to high enrollment demand within the region. Naturally, the region's physical capacity is somewhat restricted because only one state university (CSU Fullerton) is located within its boundaries. The Sacramento Area Region also is served by one State University (CSU Sacramento) is graphically depicted to have a tremendous need for additional capacity. Orange County's capacity problem is not as severe as that facing the Sacramento Area, because the county is situated within the greater Los Angeles Basin that has a number of regional campuses. Typically, about 36 percent of the Orange County public high school graduates that pursue enrollment at a CSU campus do so at one located in Los Angeles County. Similarly, about 30 percent of the public high school graduates from the San Bernardino-Riverside Region who pursue a CSU education also begin their baccalaureate careers at one of the four Los Angeles County CSU campuses.

To address important access and capacity issues, CSU planners often use highway patterns and freeway traffic flow to define geographic regions. At a very microscopic planning level, this makes sense. For example, Orange County high school graduates who live northwest of Interstate 5 will have a less hectic commute if they travel north to attend CSU Long Beach (Los Angeles County), as opposed to traveling east during heavy commute hours to attend Orange County's CSU Fullerton. This example illustrates that the distinction between *within-region college participation* and *out-region college participation* can become blurred in some instances when county boundaries are used to form regions. As note previously, though, educational and economic data are often not collected or projected at a more local level than the *county*, which necessitates defin-

ing educational regions as aggregations of counties, even when county boundaries do not precisely define an educational area.

DISPLAY 12 CSU Fall 2010 FTES Demand in Comparison to Current FTES Capacity





Perhaps the ultimate capacity challenge will emerge later in this decade, as several CSU regional campuses edge up ever so close to their Master Plan FTE enrollment ceilings in an era of Tidal Wave II demographic growth and increased college participation. The Commission's analysis indicates that CSU Sacramento and CSU Fullerton will each reach their respective enrollment ceiling within the next three years or so. For certain, increasing physical capacity through year-around operations and distance/distributed learning technological arrangements will be play a prominent role in helping the CSU to meet new student enrollment demand.

4 Analysis of Regional Undergraduate Demand

Estimating regional enrollment demand for the California Community Colleges

Introduction

The California Community Colleges system is the largest postsecondary system in the nation that currently serves approximately 1.6 million adults and recent high school graduates. Since shortly after World War II, the community college mission has continued to evolve to meet the State's changing workforce and economic needs. Presently, the system is responsible statutorily for lower-division academic instruction, occupational and vocational education, adult education, remedial and basic education, and community service and avocation programs. In 1996, the California Community College's Board of Governors, and the system's Chancellor's Office, convened a task force to help guide the system in supporting both statewide and regional needs in the 21st century. The task force began work by reviewing several important technical papers prepared by the Chancellor's staff. Those papers included *Funding Scenarios and Trends Important to the California Community Colleges*, and *Student Access*. Also of concern were several planning recommendations addressed in the CPEC Commission report, *The Challenge of the Century* (CPEC, 1995).

Among the major findings of the task force was that the California Community Colleges system undertake immediate and deliberate measures to ensure educational opportunity and access to State residents at rates similar to those recorded during the middle 1970s. It was noted that, beginning in the latter half of the 1950s, community college participation had increased steadily from approximately 40 students per 1,000 California adults to nearly 88 students per 1,000 adults in 1975. By Fall 1995, however, the peak participation rate of the 1970s had plummeted to 57.5 students per 1,000 adults.

The Commission's 1995 enrollment study pointed out that the enrollment declines that occurred during the first half of the 1990s appeared to have resulted from legislative actions undertaken by the system to manage growth in a time of fiscal uncertainty. For example, the nine percent decline in community college enrollments that occurred between Fall 1992 and Fall 1993 coincided with the implementation of Senate Bill 766 (1992). That bill raised community college fees for students with a baccalaureate degree from $6.00 per unit to $50.00 per unit, increased fees for non-baccalaureate students from $6.00 per unit to $10.00 per unit, and removed the 10-unit limit on courses for which students would be charged. Subsequent legislative action in 1993 raised the enrollment fee for students without a bachelor's degree from $10 per unit to $13 per unit.

With the sunset of Senate Bill 766 in 1996, and a return of student fees to the $12-per-unit level, community college enrollments have been on the upswing again. Between Fall 1996 and Fall 2000, systemwide enrollments increased 190,719 students. This translates to a hefty 13.6 percent increase, or an average annual compounded change of 3.3 percent. Barring another severe economic recession and downturn in the State's treasury, the Commission expects community college participation rates to continue to improve, especially in those regions that historically have had lower than average participation.

Regional demand estimates for the California Community Colleges

Display 13 shows Fall 1999 participation rates by region and age-group. The rates represent the percentage of residents of a particular age-group and region who were enrolled in a community college for Fall 1999. Among the 20-24 age category, the geographic areas with the highest rates were Orange County, the South Coast Region, and the San Francisco Bay Area Region, while the two central valley regions and the San Bernardino-Riverside region had the lowest percentage of adults participating in the community colleges. Among the 25-29 age category, geographic areas with the highest participation rates were the regions just mentioned plus the Sacramento Region, while again, rates for the two central valley regions and the San Bernardino-Riverside Region are clustered at the bottom. For the 30-49 age-group, the Los Angeles County Region ranks at the lower end. If the observed Fall 1999 regional rates remained constant over the projection, as shown by the Commission's *Low Alternative Forecast* presented in Display 14, community college demand would increase by 20.8 percent, or by an additional 329,563 students.

DISPLAY 13 Community Colleges Participation Rates by Region and Age-Group, Fall 1999

Region	18-19 Age-group	20-24 Age-group	25-29 Age-group	30-49 Age-group	50+ Age-group
Northern California	39.0	15.0	7.2	4.6	5.3
Sacramento Valley Area	37.5	17.6	9.6	5.0	3.9
San Francisco Bay Area	38.1	19.5	9.9	4.6	6.8
Northern Central Valley	30.2	11.8	5.3	3.2	3.6
Southern Central Valley	30.8	13.2	6.1	3.7	2.7
Central Coast	35.1	16.6	9.2	5.5	8.1
South Coast	41.3	20.6	8.5	5.0	7.4
Los Angeles County	36.1	17.2	7.0	3.0	2.8
Orange County	48.7	27.9	11.6	5.2	9.0
San Bernardino/Riverside	27.9	12.3	5.6	3.1	2.2
San Diego Imperial	33.8	17.0	8.1	5.1	9.4

The three regions with below average community college participation—the North Central Valley, the South Central Valley, and the San Bernardino-Riverside Region—are expected to have the largest increase in enrollment demand, due to significant demographic growth projected for those areas. As revealed by Appendix C, the number of residents of age 15 to 59 residing in the San Bernardino-Riverside Region is expected to increase by 39 percent between 1998 and 2010. Comparable figures for the North Central Valley and the South Central Valley are 33 percent and 28 percent, respectively.

In deriving the *Baseline Forecast*, analytic judgments were made concerning the rate of improvement in age-specific participation that various community college regions could reasonably expect to experience over the projection period. For the urban and suburban regions, factors that are presumed to fuel continued increases in community college participation include: (1) a favorable California labor market for jobs in which the community colleges are a major provider of training and preparation; (2) a continuing shift in the State's economy from industrial jobs to service-oriented jobs that will require educational experience beyond high school; (3) the community college's expanded role in remedial education; and (4) strategic planning initiatives that are intended to improve student access, transfer readiness, certificate and licensure completion rates, basic skills acquisition, and welfare to work transition.

The Commission's *Baseline Forecast,* presented in Display 15, indicates that enrollment demand will increase by 30 percent, which translates to 474,227 students by year 2010. Based on the *Low Alternative Forecast*, approximately 73 percent of the community college enrollment demand would be expected to result from regional demographic growth alone, while the remainder would result from the collective effects of the factors noted above. In some regions, though, demographic growth is projected to represent a higher proportion of enrollment demand, whereas in other regions it is projected to represent less. More specifically, for Orange County, the South Coast, and the San Francisco Bay Area, approximately 80 percent of the increase in community college demand is expected to result from demographic growth. This is because participation rates for those regions are already well above the statewide mean.

Further improvements in age-specific rates for those three regions were capped, so that the increase in demand resulting from such improvements did not account for more than 20 percent of the overall respective regional growth. This was done even though the past seven-year upward tends in community college participation for those regions implied higher demand than indicated by the Commission's *Baseline Forecast*.

Demographic growth also is projected to account for about 80 percent of the increase in enrollment demand for the San Diego-Imperial Region, but for a different reason. Over the past seven years, age-specific participation rates for the region have increased just slightly. When the calcu-

lated age-specific trend lines were extended over the projection period, the net result was less substantial growth effect attributable to increased participation.

During the past seven years, age-specific participation rates increased appreciably in the Central Coast Region, the Sacramento Region, and the Los Angles County Region. However, the increases were more pronounced during the middle 1990s, as California began its economic recovery, than they were towards the end of the decade, when the State's economy had fully recovered. Thus, in computing age-specific trend lines to extend forward for those regions, the Commission weighted the latter growth years more heavily. This was done because the changes in participation that occurred during the latter period provide a better indication of the average annual improvement in participation that might be expected when regional economies are more stable.

For the remaining regions, observed declines in age-specific participation rates were gradually returned to their peak levels observed between 1993 and 1999. The peak level was used, rather than the calculated seven-year average rate, because those remaining regions (e.g., central valley area, San Bernardino) have comparatively lower community college participation and are being especially targeted for outreach programs. Also, the opening of the University of California Merced campus is expected to attract students to the Merced and San Joaquin Delta community college districts for eventual transfer to the University. Appendix D lists the age-specific participation rates used to derive the Commission's *Baseline Forecast.*

*DISPLAY 14 Higher Education Regional Enrollment Demand Projections, California Community Colleges, Fall 2000 to Fall 2010 *CPEC 2001 Low Alternative Forecast*

	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central Valley	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
Fall Term												
2000	1,587,119	54,902	90,208	358,254	54,016	76,115	39,260	82,975	372,554	180,068	106,485	172,282
2001	1,597,745	56,215	91,860	359,483	55,241	77,577	39,825	84,367	366,270	181,819	109,122	175,965
2002	1,628,205	57,799	94,430	366,295	57,014	79,557	40,872	85,906	368,975	184,261	113,142	179,953
2003	1,655,059	59,051	96,800	372,226	58,573	81,224	41,887	87,200	371,515	186,305	117,038	183,240
2004	1,687,139	60,261	99,189	378,538	60,105	83,049	42,937	88,851	377,051	189,286	121,128	186,745
2005	1,711,455	61,109	101,027	383,199	61,331	84,325	43,788	89,973	380,697	191,833	124,454	189,719
2006	1,737,825	61,812	102,784	388,352	62,637	85,594	44,672	91,296	385,409	194,270	127,999	193,000
2007	1,770,289	62,558	104,724	394,080	64,013	87,093	45,524	92,802	392,832	197,694	132,041	196,926
2008	1,809,981	63,325	106,833	400,694	65,515	89,026	46,514	94,748	403,102	202,653	136,369	201,201
2009	1,868,343	64,046	109,355	408,743	67,515	92,112	47,939	97,143	422,527	210,645	141,498	206,822
2010	1,916,682	64,490	111,397	414,826	69,075	94,785	49,153	99,074	438,393	218,032	145,798	211,660
PCT Change	20.8%	17.5%	23.5%	15.8%	27.9%	24.5%	25.2%	19.4%	17.7%	21.1%	36.9%	22.9%
Actual Change	329,563	9,588	21,189	56,572	15,059	18,670	9,893	16,099	65,839	37,964	39,313	39,378

* Low Alternative Forecast holds age-specific participation rates constant at Fall 1999 observed levels. Under this forecast, the increased in enrollment demand is due solely to demographic growth.

DISPLAY 15 Higher Education Regional Enrollment Demand, Community Colleges, CPEC 2001 Baseline Forecast, Fall 2000 to 2010

	Total	Northern California	Sacreamento Area	SF Bay Area	N Central Valley	So. Central Valley	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Fall												
2000	1,587,119	54,903	90,208	358,254	54,016	76,115	39,260	82,975	372,554	180,068	106,485	172,282
2001	1,623,942	56,673	93,513	365,753	56,025	78,766	40,797	84,787	376,508	182,765	111,476	176,881
2002	1,665,498	58,655	97,120	373,954	58,241	81,498	42,450	86,661	382,366	186,089	116,785	181,679
2003	1,703,813	60,319	100,561	381,305	60,267	83,960	44,086	88,308	388,109	189,035	122,053	185,810
2004	1,747,862	61,956	104,058	389,105	62,289	86,616	45,778	90,330	397,018	192,916	127,610	190,186
2005	1,784,344	63,242	107,034	395,320	64,017	88,742	47,282	91,822	404,054	196,349	132,440	194,042
2006	1,823,348	64,394	109,953	402,109	65,847	90,884	48,828	93,532	412,337	199,660	137,574	198,230
2007	1,869,092	65,599	113,075	409,475	67,766	93,282	50,360	95,444	423,667	203,977	143,335	203,111
2008	1,922,861	66,842	116,399	417,834	69,835	96,139	52,050	97,820	438,254	209,817	149,499	208,371
2009	1,996,865	68,050	120,175	427,687	72,455	100,191	54,207	100,685	462,973	218,726	156,660	215,056
2010	2,061,346	68,969	123,492	435,606	74,638	103,881	56,178	103,105	484,365	227,111	163,005	220,998
PCT Change	29.9%	25.6%	36.9%	21.6%	38.2%	36.5%	43.1%	24.3%	30.0%	26.1%	53.1%	28.3%
Actual Change	474,227	14,065	33,284	77,352	20,622	27,766	16,918	20,130	111,811	47,043	56,520	48,716

Estimating regional enrollment demand for the California State University

Introduction

The California State University is the largest public university system in the nation. It consists of 22 regional campuses that served 291,460 undergraduates in Fall 2000 through program offerings in over 200 academic disciplines and fields. Just prior to the Commission's 1995 enrollment study, the CSU had been hard hit by the recession of the early 1990s that coincided with a dramatic loss of 50,000 students and several consecutive years of declines in first-time freshman enrollments. In 1995, the Commission had predicted that the State University would grow again beginning in 1996 and reach approximately 335,000 undergraduates by Fall 2005.

Although those projections have proven quite reliable, students have been retuning to the CSU in numbers slightly greater than predicted in 1995. In February 2000, the Commission released its updated enrollment demand forecast indicating that CSU undergraduate demand would top 395,554 by 2010. The present study incorporates the most current information available on CSU freshman and community college transfer enrollments to derive regional undergraduate estimates through 2010.

CSU regional undergraduate demand estimates

Undergraduate demand for the California State University is projected to increase by 37.3 percent between Fall 2000 and Fall 2010. As shown in Display 16, the percentage change translates to a numerical growth of 108, 585 additional undergraduates. If participation rates remain constant at Fall 1999 levels, as revealed by the Commission's *Low Alternative Forecast* presented in Display 17, the CSU would need to prepare for a 23.6 percent increase in demand, or 68,922 additional undergraduates.

Approximately 64 percent of the increase in enrollment demand is expected to result from regional population growth, and the remainder due to improvements in freshmen and community college transfer participation rates. Factors presumed to be associated with improvements in undergraduate participation include: (1) an enhanced systemwide *Memorandum of Understanding* that aims to significantly increase the flow of community college transfers to the CSU, (2) a favorable labor and industry market outlook, (3) high demand for new K-12 teachers, (4) high demand for health service professionals, (5) enhanced distributed/distance learning opportunities intended to make learning more flexible and student centered, and (6) the CSU Cornerstones Strategic Planning Initiative, which, among other aims, is intended to link the CSU more effectively with changing economic and labor market needs of the State.

On a regional basis, three areas are projected to experience exceptionally high percentage increases in undergraduate demand. These are the North Central Valley Region (56.2%), the San Bernardino-Riverside Region (55.6%), and the San Diego-Imperial Region (54.7%). The geographic areas that are expected to have the largest numerical increase in demand are the Los Angeles Region (+23,132), the San Francisco Bay Area Region (+19,152), the San Diego-Imperial Region (+16,778), and the Orange County Region (+10,523). The next two sections examine and discuss anticipated changes in freshman and transfer demand that drive the regional forecast.

Regional freshman demand estimates for the California State University

In *Providing for Progress*, the Commission highlighted the gains in CSU freshman enrollments that coincided with the State's recovery from the economic recession of the early 1990s. As noted in that report, declining state support for higher education during the recession contributed to consecutive years of declines in freshmen enrollments.

However, substantial enrollment gains were experienced during California's economic recovery. Between 1994 and 1998, the total annual enrollment of freshmen that had met all CSU requirements increased from 18,472 to 29,024, which represented a 57 percent change. The corresponding annual public high school participation rate of regularly admissible students (excludes special action admits) jumped two percentage points, from approximately 6.5 percent in 1993 to 8.5 percent in 1998. The most underrepresented ethnic-racial groups recorded the most impressive gains. For example, the annual enrollment of regularly admissible African American freshmen nearly doubled from 825 in Fall 1993 to 1,473 in Fall 1998, while the enrollment of Latino regular admits increased by 40.5 percent, from 4,143 in Fall 1993 to 5,819 in Fall 1998.

DISPLAY 16 Undergraduate Regional Enrollment Demand, California State University, CPEC 2001 Baseline Forecast, Fall 2000 to Fall 2010

	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central Valley	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Fall												
2000	291,460	20,376	20,342	57,261	5,353	20,222	2,367	15,867	85,351	23,385	10,273	30,663
2001	299,273	21,241	20,990	58,504	5,670	20,824	2,469	16,095	86,029	24,259	10,740	32,455
2002	307,379	22,142	21,658	59,774	6,005	21,443	2,574	16,326	86,712	25,165	11,229	34,351
2003	315,790	23,082	22,348	61,072	6,360	22,081	2,685	16,560	87,401	26,105	11,739	36,358
2004	324,537	24,061	23,060	62,400	6,737	22,738	2,800	16,798	88,095	27,085	12,273	38,490
2005	335,989	24,832	24,026	64,658	7,008	23,700	2,902	17,286	90,754	28,094	12,857	39,872
2006	348,262	25,610	24,988	66,989	7,283	24,655	3,004	17,831	93,848	29,243	13,483	41,328
2007	360,603	26,385	25,959	69,313	7,554	25,590	3,106	18,404	97,130	30,226	14,112	42,824
2008	371,682	27,043	26,705	71,286	7,777	26,390	3,202	18,955	100,288	31,234	14,651	44,151
2009	385,859	27,837	27,728	73,831	8,072	27,450	3,308	19,610	104,365	32,546	15,319	45,793
2010	400,046	28,602	28,737	76,413	8,362	28,505	3,396	20,214	108,483	33,908	15,985	47,441
PCT Change	37.3%	40.4%	41.3%	33.4%	56.2%	41.0%	43.5%	27.4%	27.1%	45.0%	55.6%	54.7%
Actual Change	108,586	8,226	8,395	19,152	3,009	8,283	1,029	4,347	23,132	10,523	5,712	16,778
Regional CSU Campuses		1, 2	3	4, 5, 6, 7, 8	9	10, 11	12	13, 14	15, 16, 17, 18, 19	20	21	22, 23

Note, Fall 2000 Headcounts are actual enrollments, as reported by the CSU.

Key:

1	Chico State	**7**	Calif. Maritime Academy	**13**	Cal Poly SLO	**19**	CSU Northridge
2	Humboldt State	**8**	Sonoma State	**14**	CSU Channel Island	**20**	CSU Fullerton
3	CSU Sacramento	**9**	CSU Stanislaus	**15**	Cal Poly Pomona	**21**	CSU San Bernardino
4	CSU Hayward	**10**	CSU Fresno	**16**	CSU Dominguez Hill	**22**	San Diego State
5	San Francisco State	**11**	CSU Bakersfield	**17**	CSU Long Beach	**23**	CSU San Marcos
6	San Jose State	**12**	CSU Monterey Bay	**18**	CSU Los Angeles		

DISPLAY 17 Undergraduate Regional Enrollment Demand, California State University, CPEC 2001 Low Alternative Forecast, Fall 2000 to Fall 2010

	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central Valley	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Fall												
2000	291,460	20,376	20,342	57,261	5,353	20,222	2,367	15,867	85,351	23,385	10,273	30,663
2001	296,684	21,019	20,718	57,717	5,593	20,544	2,425	15,935	86,010	24,014	10,617	32,093
2002	302,056	21,682	21,101	58,176	5,843	20,872	2,485	16,004	86,673	24,660	10,972	33,590
2003	307,582	22,366	21,491	58,639	6,105	21,204	2,546	16,072	87,342	25,323	11,339	35,156
2004	313,288	23,071	21,903	59,105	6,378	21,542	2,609	16,142	88,016	26,009	11,718	36,796
2005	320,854	23,588	22,595	60,472	6,568	22,163	2,673	16,486	89,713	26,729	12,158	37,709
2006	328,664	24,107	23,267	61,912	6,756	22,773	2,738	16,860	91,443	27,497	12,632	38,678
2007	336,468	24,613	23,935	63,331	6,936	23,354	2,806	17,246	93,207	28,269	13,101	39,671
2008	343,729	25,057	24,446	64,602	7,088	23,881	2,875	17,638	95,004	29,031	13,513	40,594
2009	352,403	25,552	25,395	66,140	7,276	24,535	2,945	18,075	96,836	29,986	13,995	41,667
2010	360,382	26,010	25,771	67,667	7,454	25,156	3,018	18,459	98,708	30,961	14,462	42,716
PCT Change	23.6%	27.7%	26.7%	18.2%	39.2%	24.4%	27.5%	16.3%	15.6%	32.4%	40.8%	39.3%
Actual Change	68,922	5,634	5,429	10,406	2,101	4,934	651	2,592	13,357	7,576	4,189	12,053
Regional CSU Campuses		1, 2	3	4, 5, 6, 7, 8	9	10, 11	12	13, 14	15, 16, 17, 18, 19	20	21	22, 23

Note, Fall 2000 Headcounts are actual enrollments, as reported by the CSU.

Key:

1	Chico State	**7**	Calif. Maritime Academy	**13**	Cal Poly SLO	**19**	CSU Northridge
2	Humboldt State	**8**	Sonoma State	**14**	CSU Channel Island	**20**	CSU Fullerton
3	CSU Sacramento	**9**	CSU Stanislaus	**15**	Cal Poly Pomona	**21**	CSU San Bernardino
4	CSU Hayward	**10**	CSU Fresno	**16**	CSU Dominguez Hill	**22**	San Diego State
5	San Francisco State	**11**	CSU Bakersfield	**17**	CSU Long Beach	**23**	CSU San Marcos
6	San Jose State	**12**	CSU Monterey Bay	**18**	CSU Los Angeles		

Display 18 provides a regional look at the improvement in CSU freshmen participation for the period, 1990 to 1999. The participation rate represents the proportion of public high school graduates that enroll at a CSU campus upon graduation. Public high school graduates typically account for about 84 percent of total freshmen enrollments. Notice that the mean public high school participation rate (includes special action admits) increased by just over two percentage points between 1993 and 1999. The improvement in participation paralleled California's economic recovery of that period.

At the outset of the reporting period in 1990, the Los Angeles County Region (11.9), the San Francisco Bay Area Region (11.5), and the Orange County Region (10.7) had recorded the highest participation rates. By 1999, the highest freshman participation rates were recorded by the San Francisco Bay Area Region (11.4), the San Diego-Imperial Region (10.4), and the Los Angeles County Region (9.9). The gain in participation for the San Diego area was tied to the opening of CSU San Marcos, which began admitting freshmen in 1995.

DISPLAY 18 Public High School Participation Rates by Region for the California State University, 1990 to 1999

	Statewide Mean	Northern CA.	Sac Area	SF Bay Area	North Central V.	South Central V.	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
1990	9.9	9.0	8.3	11.5	6.3	8.9	7.5	5.7	11.9	10.7	7.2	8.7
1991	9.3	8.5	6.8	10.9	7.1	9.8	7.6	6.9	11.4	9.5	6.7	7.4
1992	7.6	6.5	5.9	9.2	6.4	7.7	7.0	4.8	9.1	7.0	5.2	6.0
1993	7.4	6.0	7.1	8.5	6.2	7.5	7.9	4.5	8.5	6.5	5.5	6.1
1994	8.1	7.0	8.4	9.6	7.0	8.4	8.4	5.0	9.2	7.5	5.8	7.9
1995	8.7	8.0	8.8	9.9	7.5	8.8	8.8	5.6	9.7	7.9	6.8	9.8
1996	9.4	8.1	9.3	10.6	7.7	9.5	9.1	6.1	10.6	9.0	7.4	9.9
1997	9.3	8.2	8.7	10.8	7.4	9.4	9.1	6.3	10.2	8.8	7.2	10.3
1998	9.2	9.1	9.3	10.9	7.5	9.2	8.3	6.4	9.4	9.2	7.7	10.7
1999	9.6	9.4	9.6	11.4	8.2	9.7	8.7	6.9	9.9	9.4	7.7	10.4
Total Change	-0.3	0.4	1.3	-0.1	1.9	0.8	1.2	1.2	-2	-1.3	0.5	1.7
Change 99/93*	2.2	3.4	2.5	2.9	2	2.2	0.8	2.4	1.4	2.9	2.2	4.3

***Note:** The change between 1993 and 1999 represents the improvement in CSU freshmen participation that coincided with the State's economic recovery from the early 1990's recession.

Display 19 shows rankings based on regional college eligibility rates and the projected change in the size of each region's public high school graduating class. Class size rankings are expressed in both numerical and percentage terms and cover the period 1999 to 2010. The college eligibility rate represents the percentage of public high school graduates from a region that were estimated to have met all CSU admission requirements,

based on the CPEC 1996 College Eligibility Study. Eligibility rankings reflect statistically significant differences in regional freshman eligibility; that is, differences greater than one percentage point. The San Francisco Bay Area Region, the Orange County Region, the San Diego-Imperial Region, and the South Coast Region are shown to have high college eligibility rankings combined with large anticipated changes the size of their respective public high school graduating classes, either in absolute terms or percentage-wise. Such correlated rankings are a major reason why those regions are projected to face significant increases in undergraduate demand.

DISPLAY 19 Regional Rankings by Size of Public High School Graduating Class and College Eligibility

	High School Graduate Size Ranking		**CSU High School Eligibility Rate**	
	Num Grw	PCT Change	Percent	Rank
Northern California	11	11	28.1	5
Sacramento Area	7	5	30.8	3
San Francisco Bay Area	3	10	35.1	1
Northern Central Valley	9	6	21.3	8
Southern Central Valley	6	8	24.6	6
Central Coast	10	9	29.2	4
South Coast	8	4	31.7	2
Los Angeles County	1	3	27.6	5
Orange County	4	1	34.2	1
San Bernardino/Riverside	2	2	22.8	7
San Diego/Imperial	5	7	34.3	1

The Commission's 2000 statewide projections, reported in *Providing for Progress*, were based on the assumption that the CSU freshman participation rate would continue to increase moderately at an annual rate just under a tenth of a percentage point per year. Because the actual CSU freshman enrollments for the past two years have been slightly higher than the Commission's statewide forecast, a *full* tenth (0.1) of a percentage point annual increase in the freshman participation rate has been forecasted for the six public high regions that have posted above average growth in participation since 1993. The remaining regions are forecast to realize a more modest annual improvement rate (0.05) in freshmen participation.

It is evident form Display 20 that most high school graduates who pursue a State University education tend to enroll at a CSU campus located in the same region as their high school or home. Excluding the Central Coast

Region, the 1999 *within-region participation percentages* (read diagonally on Display 20) ranged from a high of approximately 70 percent for the Southern Central Valley, Los Angeles County, and San Diego/Imperial regions, to a moderate 34.1 percent for the San Bernardino-Riverside Region. Because the w*ithin-region* and *out-region* participation percentages have been quite stable over the past 10 years, both rates were held constant throughout the projection period. As mentioned previously, however, student enrollment choices will undoubtedly change somewhat over time as new campus facilities and off-campus centers are made available throughout various regions of California, and as regional enrollment management practices are put in practice.

When the projected regional participation rates are applied to the Department of Finances' 1999 Projections Series of Public High School Graduates, and after the projected numerical figures are distributed across regions based on the *within-region* and *out-region* percentage figures, CSU freshman enrollment demand of public high school graduates is projected to increase from 28,478 in 1999 to 39,314 by year 2010. When the Fall projections are converted to annual totals, and adjustments made for students from *private California high schools, out-of-state high schools, and foreign secondary schools*, CSU freshmen demand is projected to increase from 35,664 in 1999 to 49,235 by year 2010. As revealed in Display 21, this represents a 38.1 percent change in freshmen participation, or 13,571 additional students. If the regional public high school participation rates were held constant, as shown by the Commission's Low Alternative Forecast presented in Display 22, CSU freshmen demand would total 45,403. This means that approximately 72 percent of the change in CSU freshmen demand is expected to result from the anticipated growth in the number of public high school graduates across regions.

Appendix E shows *within-region* and *out-region* numerical headcounts that have not been summed together. The data are provided for institutional research officers and other planners who might desire more detailed projection data to support their regional planning efforts. For instances, Appendix E makes it possible for a CSU Institutional Research Director (IR) to compare the inflow of freshman to one's own campus against the projected inflow of freshman to the region in which the campus is situated. Because the projections are reported separately for both *within-region* and *out-region* freshman demand, it also is possible for the IR Director to assess the potential impact of particular regional recruitment strategies that may be under consideration.

DISPLAY 20 Public High School Participation Rates and Within-Region and Out-Region Enrollment Percentages for the California State University, 1993 and 1999

High School Region		CSU Region Where the High School Graduates Enrolled (sums to 100%)										
	Mean Rate	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Northern CA												
1993	6.0%	61.5%	7.7%	11.3%	0.8%	1.7%	0.0%	10.3%	2.3%	0.4%	0.0%	4.0%
1999	9.4%	59.2%	7.5%	11.7%	0.6%	0.5%	1.1%	10.9%	4.6%	0.5%	0.0%	3.5%
Sacramento Area												
1993	7.1%	18.1%	51.0%	7.2%	0.5%	2.0%	0.0%	10.6%	4.2%	0.7%	0.1%	5.6%
1999	9.6%	13.1%	53.4%	8.7%	0.3%	1.5%	1.3%	10.3%	4.1%	0.2%	0.2%	7.0%
SF Bay Area												
1993	8.5%	14.6%	7.5%	52.0%	1.1%	3.8%	0.0%	12.4%	4.2%	0.2%	0.1%	4.3%
1999	11.4%	12.1%	4.6%	58.6%	0.3%	1.0%	0.9%	9.9%	5.1%	0.1%	0.0%	7.4%
N. Central Valley												
1993	6.2%	11.1%	4.8%	10.5%	35.2%	18.7%	0.0%	13.6%	3.2%	0.9%	0.0%	1.9%
1999	8.2%	10.0%	12.8%	14.9%	27.2%	15.2%	0.5%	10.2%	4.4%	0.2%	0.3%	4.4%
So. Central Valley												
1993	7.5%	3.5%	0.6%	3.0%	0.8%	73.1%	0.0%	10.9%	3.9%	0.7%	0.1%	3.5%
1999	9.7%	3.4%	1.1%	3.7%	0.6%	70.4%	0.7%	9.2%	6.0%	0.3%	0.2%	4.5%
Central Coast												
1993	7.9%	16.2%	4.9%	26.9%	5.8%	15.3%	0.0%	18.7%	4.0%	0.3%	0.0%	8.0%
1999	8.7%	12.0%	7.1%	27.8%	1.2%	7.4%	12.3%	18.0%	5.2%	0.3%	0.0%	8.8%
South Coast												
1993	4.5%	14.5%	4.5%	10.0%	1.6%	5.9%	0.0%	35.9%	22.1%	1.0%	0.0%	4.7%
1999	6.9%	9.0%	1.1%	10.6%	0.5%	4.0%	0.9%	34.6%	24.7%	0.6%	0.0%	13.9%
LA. County												
1993	8.5%	2.6%	0.4%	3.7%	0.1%	1.9%	0.0%	3.2%	69.3%	9.6%	0.7%	8.4%
1999	9.9%	2.1%	0.2%	3.6%	0.1%	1.0%	0.5%	2.7%	70.2%	12.6%	0.8%	6.2%

DISPLAY 20 (continued)

High School Region		CSU Region Where the High School Graduates Enrolled (sums to 100%)										
	Mean Rate	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Orange County												
1993	6.5%	9.4%	0.7%	4.7%	0.3%	1.8%	0.0%	6.9%	30.1%	35.1%	0.2%	10.8%
1999	9.4%	3.6%	0.4%	4.0%	0.1%	0.6%	0.4%	4.9%	35.5%	39.8%	0.2%	10.2%
San Bern/Riverside												
1993	5.5%	2.7%	0.7%	2.7%	0.2%	1.9%	0.0%	3.9%	22.1%	11.8%	44.2%	9.8%
1999	7.7%	2.5%	0.6%	2.3%	0.4%	1.1%	0.6%	3.7%	29.2%	15.3%	34.1%	10.2%
San Diego/Imperial												
1993	6.1%	9.3%	1.0%	5.3%	0.4%	1.0%	0.0%	9.4%	10.1%	2.1%	0.7%	60.6%
1999	10.4%	4.3%	0.6%	5.2%	0.1%	0.6%	0.5%	6.7%	10.5%	1.1%	0.7%	69.7%
State Total 1993	7.4%	10.0%	5.5%	16.0%	2.1%	8.4%	0.0%	9.0%	27.8%	6.9%	3.6%	10.6%
1999	9.6%	8.4%	5.5%	18.2%	1.5%	6.8%	0.9%	7.9%	26.7%	8.0%	3.0%	13.0%

DISPLAY 21 California State University First-Time Freshman Enrollment Demand by CSU Region, Baseline Forecast, Academic Year 1999-00 to 2010-11 (includes out-of-state students, foreign students, and students from private high schools)

Year	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
1999-00	35,664	2,915	1,917	6,030	545	2,523	320	2,744	9,862	2,906	1,202	4,700
2000-01	36,728	2,957	1,996	6,222	569	2,590	326	2,844	10,101	2,995	1,247	4,880
2001-02	37,766	3,047	2,057	6,392	589	2,629	336	2,938	10,351	3,112	1,307	5,009
2002-03	38,829	3,126	2,114	6,562	604	2,744	350	3,017	10,637	3,214	1,326	5,134
2003-04	40,267	3,215	2,200	6,762	615	2,813	361	3,126	11,113	3,349	1,405	5,309
2004-05	40,991	3,239	2,237	6,860	625	2,879	367	3,172	11,345	3,416	1,445	5,407
2005-06	42,027	3,277	2,286	6,985	632	2,890	374	3,236	11,749	3,546	1,498	5,554
2006-07	44,110	3,408	2,391	7,330	660	2,987	389	3,381	12,376	3,752	1,595	5,841
2007-08	45,607	3,506	2,486	7,535	679	3,066	404	3,504	12,815	3,898	1,649	6,064
2008-09	48,633	3,681	2,598	7,968	720	3,255	428	3,730	13,823	4,215	1,763	6,453
2009-10	48,915	3,653	2,629	7,952	717	3,298	430	3,745	13,998	4,281	1,754	6,458
2010-11	49,235	3,649	2,634	7,994	710	3,294	434	3,757	14,108	4,351	1,764	6,539
PCT Change	38.1%	25.2%	37.4%	32.6%	30.3%	30.5%	35.6%	36.9%	43.1%	49.7%	46.8%	39.1%
Actual Change	13,571	734	717	1,964	165	771	114	1,014	4,246	1,445	562	1,839
Regional CSU Campuses		1, 2	3	4, 5, 6, 7, 8	9	10, 11	12	13, 14	15, 16, 17, 18, 19	20	21	22, 23

Key:

1	Chico State	**7**	Calif. Maritime Academy	**13**	Cal Poly SLO	**19**	CSU Northridge
2	Humboldt State	**8**	Sonoma State	**14**	CSU Channel Island	**20**	CSU Fullerton
3	CSU Sacramento	**9**	CSU Stanislaus	**15**	Cal Poly Pomona	**21**	CSU San Bernardino
4	CSU Hayward	**10**	CSU Fresno	**16**	CSU Dominguez Hill	**22**	San Diego State
5	San Francisco State	**11**	CSU Bakersfield	**17**	CSU Long Beach	**23**	CSU San Marcos
6	San Jose State	**12**	CSU Monterey Bay	**18**	CSU Los Angeles		

DISPLAY 22 California State University First-Time Freshman Enrollment Demand by Region, Academic Year 1999-00 to 2010-11 (includes out-of-state students, foreign students, and students from private high schools) Low Alternative Forecast

Fall	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/
1999	35,664	2,915	1,917	6,030	545	2,523	320	2,744	9,862	2,906	1,202	4,700
2000	36,446	2,931	1,977	6,169	565	2,575	324	2,819	10,036	2,972	1,239	4,837
2001	37,190	2,993	2,019	6,284	582	2,599	331	2,886	10,218	3,065	1,290	4,922
2002	37,948	3,044	2,056	6,398	592	2,698	343	2,938	10,434	3,141	1,301	5,002
2003	39,060	3,104	2,120	6,539	600	2,750	351	3,018	10,832	3,249	1,370	5,128
2004	39,469	3,102	2,136	6,579	606	2,799	353	3,037	10,990	3,289	1,399	5,179
2005	40,171	3,111	2,164	6,644	609	2,795	358	3,072	11,311	3,389	1,442	5,276
2006	41,855	3,210	2,243	6,916	632	2,872	369	3,183	11,842	3,560	1,526	5,503
2007	42,961	3,274	2,312	7,053	646	2,932	381	3,271	12,186	3,671	1,568	5,666
2008	45,487	3,410	2,396	7,399	681	3,095	401	3,452	13,066	3,941	1,666	5,981
2009	45,429	3,357	2,403	7,327	674	3,120	400	3,438	13,151	3,974	1,647	5,938
2010	45,403	3,328	2,387	7,308	663	3,099	400	3,422	13,174	4,009	1,647	5,964
PCT Change	27.3%	14.1%	24.5%	21.2%	21.7%	22.8%	25.2%	24.7%	33.6%	37.9%	37.0%	26.9%
Num. Change	9,739	412	470	1,279	118	576	81	678	3,312	1,103	445	1,264
Regional CSU Campuses		1, 2	3	4, 5, 6, 7, 8	9	10, 11	12	13, 14	15, 16, 17, 18, 19	20	21	22, 23

Key:

1	Chico State	**7**	Calif. Maritime Academy	**13**	Cal Poly SLO	**19**	CSU Northridge
2	Humboldt State	**8**	Sonoma State	**14**	CSU Channel Island	**20**	CSU Fullerton
3	CSU Sacramento	**9**	CSU Stanislaus	**15**	Cal Poly Pomona	**21**	CSU San Bernardino
4	CSU Hayward	**10**	CSU Fresno	**16**	CSU Dominguez Hill	**22**	San Diego State
5	San Francisco State	**11**	CSU Bakersfield	**17**	CSU Long Beach	**23**	CSU San Marcos
6	San Jose State	**12**	CSU Monterey Bay	**18**	CSU Los Angeles		

Regional community college transfer demand to the CSU

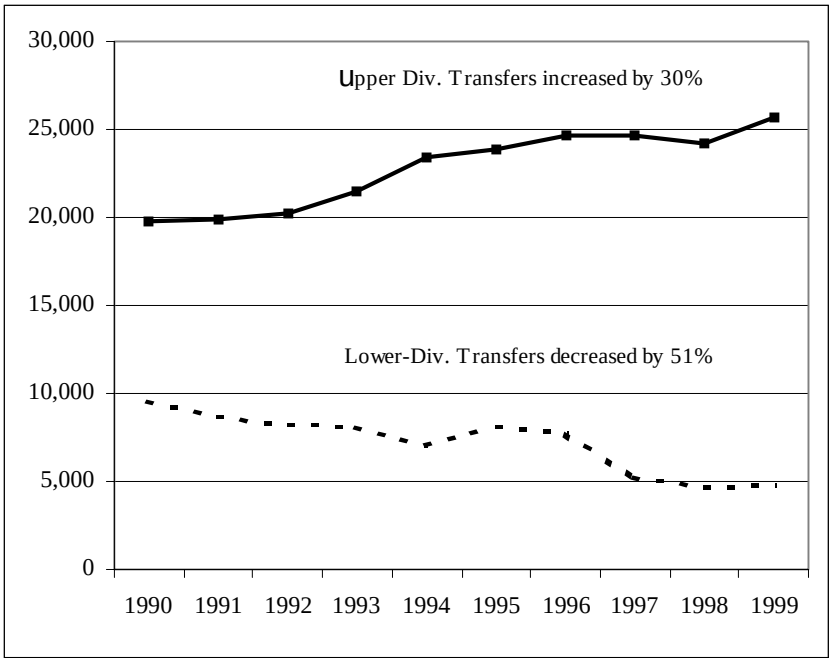
The State University regards the community-college transfer function as an important facet of providing a baccalaureate education for California's diverse population of learners, many of whom are working adults with established families. Because of the enormous complexities associated with student transfer, it is helpful to advance a general theoretical perspective to help guide the process of projecting annual community college transfers to the State University.

It is generally acknowledged that optimal levels of transfer are a function of (1) clearly defined course articulation procedures, (2) effective local efforts to disseminate and explain articulation procedures and CSU transfer requirements, (3) a system that allows students to monitor their progress in meeting requirements for their intended major, (4) special outreach activities to assist underrepresented groups, and (5) evaluative information collected and used by sending and receiving institutions to monitor their success in helping students achieve personal transfer goals. A plausible transfer hypothesis can be stated as follows:

> . . . if significant numbers of community college students enroll with CSU transfer as their goal, and if the five aforementioned strategic planning initiatives are in fact essential to successful student transfer, and if they are being implemented successfully across all regions of the state, then the number of annual transfers to the CSU should, at the very minimum, keep pace with regional demographic growth or increase moderately.

Many educators and legislators have been pointing to recent declines in the number of transfers to the CSU as evidence that the transfer function is not meeting expectations. Between 1995 and 1998, community college transfers to the CSU declined by about 10 percent. It appears from Display 23, however, that the declines may be associated with CSU policy adopted in 1995 to restrict the number of lower-division transfers. As graphically depicted, upper-division transfers increased by 30 percent, while lower-division transfers plummeted by 51 percent. Thus, it appears that the CSU's strategic transfer initiatives have been effective in promoting upper-division transfer.

DISPLAY 23 California Community Colleges Transfers to the CSU, by Class Level, Fall 1990 to Fall 1999



By 2005, the university had anticipated enrolling approximately 64,000 community college transfer students annually. Because transfer rates generally peaked in 1996 across all age-groups and geographic regions, perhaps a more realistic goal for a predictive model for CSU would be to set annual regional targets based on age-specific transfer rates gradually returning to 1996 peak levels. The Commission's *Baseline Forecast* is based on that premise. The challenge will be for the regional community colleges and the regional CSU campuses to achieve 1996 rates again, while focusing primarily on upper-division, transfer-ready students.

As shown by the Commission's *Baseline Forecast* presented in Display 24, annual community college transfer demand would total 58,711 by 2005 and top 71,000 by 2010. If community college transfer rates were held constant, as reflected by the Commission's *Low Alternative Forecast* presented in Display 25, transfer demand would increase by 31.4 percent, reflecting an annual transfer demand of 60,458 by 2010. It is assumed that community college students will continue to account for about 86.5 percent of the total entering transfer population. The remaining 13.5 percent is expected to include students from other California colleges and universities (4.0%), students from out-of-state institutions (7.5%), and students from foreign countries (2%). When community college transfers are combined with the other transfer populations noted above, Display 26 indicates that total annual transfer demand is expected to increase by 55 percent over the projection period, or 28,749 additional students by 2010. This represents an annual compounded change rate of 4.1 percent. Under

the Commission's Low Alternative Forecast presented in Display 27, total undergraduate annual transfers would increase by 33.7 percent, or an annual compounded change of 2.7 percent.

In deriving the transfer forecast, it was necessary for the Commission to calculate *within-region* and *out-region* transfer percentages separately for five age groups. Displays 28, 29, and 30 show those percentages for the 20-24 age group, the 25-29 age group, and the 30-49 age group, respectively. In general, students tend to transfer to a CSU campus located in the same region as their community college of last attendance. There does, however, appear to be a moderate correlation between age-group and the *within-region* transfer percentages. Research conducted by the California Community Colleges as they established a goal of "transfer preparedness" in the Partnership For Excellence initiative, quantified that the older a community college student was the more place-bound they were likely to be. With the average community college student being nearly 27 years old, they are far more likely to have employment and family responsibilities that require a more permanent local residence than would a 20-24 year-old. Using the Sacramento Area Region as an example, of the students ages 20 to 24 who transfer to a CSU in Fall 1999, about 68 percent enrolled at CSU Sacramento. For the 25 to 29 age group the within region transfer percentage was 85 percent, and for the 30 to 49 age group it was 88 percent.

For the 25 to 29 age group, the *within-region* transfer percentage was 55 percent, and for the 30 to 49 age group it was 75 percent. A similar linear relation between age-group and the *within-region* transfer rate exits for many of the other regions.

Potential effect of institutional support programs on student transfer

Given the Commission's community college transfer estimates, some public officials may wish to know the anticipated annual increase in transfer flow to the CSU that is expected to result from each percentage point increase in mean regional transfer rates? Because *region* is the primary unit of analysis, the answer depends on the size of each region's community college enrollments projected between 2000 and 2010. Naturally, a large region with, let us say over 300,000 students enrolled in its community colleges, would yield a higher number of annual CSU transfers for each percentage point increase in its mean transfer rate, than would result from a comparatively smaller region achieving the same percentage point change in its mean transfer rate.

Appendix E-1 to E-4 shows each region's overall mean and selected age-specific CSU community college transfer rates for the years 1993, 1996, and 1999. The data are organized by size of region, as reflected by its community college enrollments. By arraying the data in this fashion, it is possible to provide a general estimate of the incremental flow of transfers to the CSU that would result from each tenth (0.1) of a percentage point improvement in mean transfer rates. As revealed by the footnotes accompanying the displays, each tenth of a percentage point improvement

in the mean transfer rate for the Los Angeles County Region and the San Francisco Bay Area Region would represent an annual average of 393 additional transfers to the CSU over the projection period. The same tenth of a percentage point improvement in the mean transfer rate for the Northern California Region, the Northern Central Valley Region, and the Central Coast Region would represent an annual average of 63 additional transfers to the CSU over the projection period.

The incremental improvement in student transfer is often referred to as *Effect Size*, or simply *ES*. Theoretically, *ES*, within the context of this study, reflects the collective effect of collaborative transfer support programs on transfer student flow. The Commission intends to monitor transfer flow to determine if the projected regional effect sizes implied in its Baseline Forecast prove reliable. Reasonable adjustments will be made if necessary. Ultimately, quantitative data, such as that provided in this study, will need to be combined with a wide body of qualitative data to truly begin to discern the complexities of student transfer on a regional basis.

The Commission's transfer enrollment model is influenced out of necessity by the CSU's recent focus on increasing upper division transfers and decreasing lower division transfers from community colleges. However, in so doing, it should not be interpreted that the Commission is de-emphasizing State policy objectives and Commission-adopted positions advocating increases in the numbers of students transferring from community colleges to baccalaureate degree-granting institutions.

The goal of seamless transfer is framed in the State's higher education Master Plan. This goal was restated in Senate Bill 121 (Sen. Gary Hart, Chapter 1188, Statutes of 1991), which implemented recommendations of the 1988 report of the Legislature's Joint Committee on Review of the Master Plan regarding desirable improvements in the operation of the transfer function in California public higher education. The goal of overall improvements in the transfer process and in community college transfer outcomes remains the Commission's highest priority in the area of student transfer

DISPLAY 24 Annual Community College Transfers to the California State University '1999-00 to 2010-11, by Region, CPEC 2001 Baseline Forecast

	CSU Region of Transfer											
	Total	**Northern California**	**Sacra-mento**	**SF Bay Area**	**N Central Valley**	**So. Central Valley**	**Central Coast**	**South Coast**	**LA County**	**Orange**	**San Bern/ Riverside**	**San Diego/ Imperial**
Year												
1999-00	46,010	3,091	3,883	9,889	1,134	3,020	448	1,186	12,608	4,116	1,794	4,841
2000-01	47,995	3,246	4,096	10,328	1,201	3,212	475	1,242	13,034	4,220	1,896	5,046
2001-02	50,119	3,419	4,330	10,797	1,276	3,434	504	1,309	13,416	4,334	2,011	5,289
2002-03	52,145	3,572	4,547	11,242	1,345	3,648	532	1,367	13,803	4,453	2,126	5,510
2003-04	54,426	3,734	4,778	11,743	1,418	3,874	563	1,433	14,275	4,603	2,249	5,756
2004-05	56,669	3,889	5,000	12,230	1,489	4,092	595	1,494	14,761	4,755	2,370	5,992
2005-06	58,711	4,021	5,201	12,678	1,553	4,290	625	1,547	15,211	4,894	2,485	6,206
2006-07	60,802	4,147	5,395	13,129	1,613	4,481	655	1,601	15,709	5,042	2,604	6,426
2007-08	63,135	4,286	5,603	13,627	1,679	4,686	687	1,661	16,286	5,220	2,729	6,670
2008-09	65,509	4,420	5,808	14,125	1,744	4,889	721	1,719	16,905	5,406	2,858	6,913
2009-10	68,233	4,569	6,027	14,688	1,814	5,113	757	1,787	17,644	5,642	3,000	7,192
2010-11	71,309	4,729	6,256	15,289	1,886	5,364	797	1,866	18,528	5,936	3,150	7,506
PCT Change	55.0%	53.0%	61.1%	54.6%	66.3%	77.6%	77.7%	57.4%	47.0%	44.2%	75.6%	55.1%
Actual Change	25,299	1,638	2,374	5,399	752	2,344	349	681	5,920	1,820	1,356	2,665

DISPLAY 25 Annual Community College Transfers to the California State University 1999-00 to 2010-11, by Region, CPEC 2001 Low Alternative Forecast

	CSU Region Where Transfers Enrolled											
	Total	**Northern California**	**Sacra-mento**	**SF Bay Area**	**N Central Valley**	**So. Central Valley**	**Central Coast**	**South Coast**	**LA County**	**Orange**	**San Bern/ Riverside**	**San Diego/ Imperial**
Year												
1999-00	46,010	3,091	3,883	9,889	1,134	3,020	448	1,186	12,608	4,116	1,794	4,841
2000-01	45,928	3,116	3,928	9,858	1,149	3,053	450	1,189	12,487	4,053	1,816	4,830
2001-02	47,331	3,250	4,107	10,145	1,204	3,201	467	1,238	12,697	4,123	1,903	4,997
2002-03	48,610	3,363	4,266	10,404	1,252	3,336	482	1,277	12,908	4,196	1,988	5,139
2003-04	50,098	3,481	4,436	10,710	1,303	3,478	500	1,323	13,193	4,296	2,078	5,301
2004-05	51,520	3,591	4,593	10,998	1,351	3,608	518	1,363	13,485	4,397	2,165	5,450
2005-06	52,727	3,677	4,728	11,245	1,391	3,718	533	1,395	13,737	4,483	2,244	5,576
2006-07	53,954	3,756	4,854	11,492	1,427	3,818	548	1,427	14,028	4,575	2,325	5,703
2007-08	55,369	3,846	4,991	11,775	1,468	3,927	564	1,465	14,381	4,692	2,410	5,851
2008-09	56,790	3,928	5,121	12,055	1,506	4,032	580	1,500	14,764	4,814	2,497	5,994
2009-10	58,492	4,023	5,262	12,386	1,547	4,150	599	1,542	15,244	4,979	2,593	6,165
2010-11	60,458	4,125	5,409	12,746	1,591	4,288	619	1,594	15,839	5,190	2,695	6,363
PCT Change	31.4%	33.5%	39.3%	28.9%	40.3%	42.0%	38.2%	34.4%	25.6%	26.1%	50.2%	31.4%
Actual Change	14,448	1,034	1,526	2,857	457	1,268	171	408	3,231	1,074	901	1,522

DISPLAY 26 Annual Undergraduate Transfers to the California State University, 1999-00 to 2010-11, by Region, CPEC Baseline Forecast (Includes Transfers from Out-of-State, Foreign, and other CA Postsecondary Institutions)

	CSU Region of Transfer											
	Total	**Northern California**	**Sacra-mento**	**SF Bay Area**	**N Central Valley**	**So. Central Valley**	**Central Coast**	**South Coast**	**LA County**	**Orange**	**San Bern/ Riverside**	**San Diego/ Imperial**
Year												
1999-00	52,284	3,513	4,412	11,238	1,289	3,432	510	1,347	14,328	4,677	2,039	5,501
2000-01	54,540	3,688	4,655	11,737	1,365	3,650	539	1,412	14,811	4,795	2,154	5,734
2001-02	56,953	3,885	4,920	12,269	1,450	3,903	572	1,487	15,245	4,925	2,286	6,011
2002-03	59,256	4,059	5,167	12,775	1,528	4,146	605	1,553	15,685	5,060	2,416	6,262
2003-04	61,848	4,243	5,430	13,344	1,612	4,402	640	1,628	16,222	5,230	2,556	6,541
2004-05	64,397	4,419	5,682	13,898	1,693	4,650	676	1,698	16,774	5,404	2,693	6,810
2005-06	66,717	4,570	5,911	14,406	1,765	4,875	710	1,758	17,285	5,561	2,824	7,053
2006-07	69,094	4,712	6,131	14,920	1,833	5,092	744	1,819	17,852	5,730	2,959	7,302
2007-08	71,745	4,871	6,367	15,485	1,908	5,325	781	1,887	18,507	5,931	3,101	7,580
2008-09	74,442	5,023	6,600	16,051	1,982	5,556	819	1,954	19,210	6,143	3,247	7,856
2009-10	77,538	5,192	6,849	16,690	2,061	5,810	860	2,030	20,050	6,412	3,409	8,173
2010-11	81,033	5,374	7,110	17,374	2,144	6,096	906	2,121	21,055	6,746	3,580	8,529
PCT Change	55.0%	53.0%	61.1%	54.6%	66.3%	77.6%	77.7%	57.4%	47.0%	44.2%	75.6%	55.1%
Actual Change	28,749	1,861	2,698	6,136	855	2,664	396	774	6,727	2,069	1,541	3,028

DISPLAY 27 Annual Undergraduate Transfers to the California State University, 1999-00 to 2010-11, by Region, CPEC 2001 Low Alternative Forecast (Includes Transfers from Out-of-State, Foreign, and other CA Postsecondary Institutions)

	CSU Region Where Transfers Enrolled											
	Total	**Northern California**	**Sacra-mento**	**SF Bay Area**	**N Central Valley**	**So. Central Valley**	**Central Coast**	**South Coast**	**LA County**	**Orange**	**San Bern/ Riverside**	**San Diego/ Imperial**
Year												
1999-00	52,286	3,513	4,412	11,238	1,289	3,432	510	1,347	14,328	4,677	2,039	5,501
2000-01	53,096	3,603	4,542	11,396	1,328	3,529	520	1,375	14,435	4,685	2,099	5,583
2001-02	54,718	3,757	4,748	11,728	1,392	3,700	540	1,431	14,679	4,767	2,200	5,777
2002-03	56,197	3,888	4,932	12,028	1,448	3,856	558	1,476	14,922	4,851	2,298	5,941
2003-04	57,917	4,024	5,128	12,381	1,507	4,020	578	1,529	15,252	4,967	2,403	6,128
2004-05	59,560	4,151	5,310	12,715	1,562	4,172	598	1,576	15,590	5,083	2,502	6,301
2005-06	60,956	4,251	5,466	13,000	1,608	4,298	616	1,612	15,881	5,182	2,594	6,446
2006-07	62,374	4,342	5,612	13,286	1,650	4,414	633	1,650	16,217	5,289	2,688	6,594
2007-08	64,010	4,446	5,769	13,613	1,697	4,540	652	1,693	16,626	5,424	2,786	6,764
2008-09	65,653	4,541	5,920	13,936	1,741	4,661	671	1,734	17,068	5,566	2,886	6,929
2009-10	67,620	4,651	6,084	14,319	1,789	4,798	692	1,783	17,623	5,756	2,998	7,128
2010-11	69,894	4,769	6,254	14,735	1,839	4,957	716	1,843	18,311	6,000	3,115	7,356
PCT Change	33.7%	35.7%	41.7%	31.1%	42.7%	44.4%	40.4%	36.8%	27.8%	28.3%	52.8%	33.7%
Actual Change	17,608	1,256	1,842	3,497	550	1,525	206	496	3,983	1,323	1,076	1,855

DISPLAY 28 With-in Region and Out-Region Community College Transfers to the California State University, Fall 1993 & 1999, 20-24 Age Group

Community College Region of Last Attendance	CSU Region of Transfer (sums to 100%)											
	Number	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Northern CA												
1993	699	66.8%	13.7%	9.4%	1.4%	1.3%	0.0%	2.9%	1.3%	0.7%	0.6%	1.9%
1999	823	64.8%	14.9%	10.2%	0.6%	1.2%	0.6%	2.1%	1.8%	0.4%	0.4%	3.0%
Sacramento Area												
1993	1,203	13.0%	64.6%	10.3%	0.3%	1.8%	0.0%	3.3%	3.1%	0.8%	0.3%	2.4%
1999	1,295	12.0%	67.7%	7.7%	0.4%	0.8%	0.2%	2.8%	3.5%	0.6%	0.3%	4.0%
SF Bay Area												
1993	4,724	8.0%	9.2%	69.4%	0.7%	2.2%	0.0%	4.1%	3.4%	0.4%	0.2%	2.6%
1999	4,225	6.5%	7.4%	72.1%	0.5%	0.9%	0.9%	2.9%	3.0%	0.5%	0.1%	5.2%
N. Central Valley												
1993	799	10.3%	13.6%	15.6%	36.3%	11.3%	0.0%	5.9%	3.1%	0.4%	0.4%	3.1%
1999	914	8.1%	16.8%	12.3%	39.7%	9.1%	1.2%	3.4%	3.5%	0.4%	0.0%	5.5%
So. Central Valley												
1993	1,154	4.9%	2.7%	5.3%	1.2%	71.8%	0.0%	5.3%	4.7%	1.1%	0.4%	2.5%
1999	1,302	4.1%	1.6%	4.9%	1.6%	74.8%	0.7%	2.6%	5.7%	0.8%	0.5%	2.7%
Central Coast												
1993	436	10.6%	8.9%	47.2%	3.4%	9.9%	0.0%	9.9%	5.0%	0.2%	0.5%	4.4%
1999	375	8.3%	10.9%	36.3%	3.2%	6.1%	13.6%	6.7%	5.1%	0.5%	0.0%	9.3%
South Coast												
1993	1,132	13.7%	3.4%	14.7%	0.7%	8.1%	0.0%	21.1%	28.7%	1.2%	0.4%	7.9%
1999	1,331	8.1%	2.6%	12.4%	0.7%	3.8%	1.3%	19.4%	39.5%	0.9%	0.3%	11.1%
LA. County												
1993	3,680	2.3%	0.7%	4.9%	0.3%	1.4%	0.0%	1.8%	74.1%	8.4%	2.3%	3.8%
1999	3,610	1.4%	0.4%	3.0%	0.1%	1.4%	0.2%	0.8%	76.5%	12.1%	0.9%	3.2%

DISPLAY 28 Continued

Community College Region of Last Attendance		CSU Region of Transfer (sums to 100%)										
	Number	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Orange County												
1993	2,010	4.1%	0.3%	6.3%	0.2%	1.5%	0.0%	2.8%	35.7%	39.8%	1.0%	8.3%
1999	2,112	2.3%	0.2%	3.2%	0.1%	0.7%	0.2%	1.3%	35.9%	49.1%	0.7%	6.4%
San Bern/Riverside												
1993	868	1.8%	1.0%	5.6%	0.2%	0.9%	0.0%	2.4%	21.3%	6.8%	52.3%	7.5%
1999	989	2.0%	0.6%	2.6%	0.3%	1.2%	0.4%	1.0%	22.0%	10.8%	50.3%	8.7%
San Diego/Imperial												
1993	1,709	4.7%	1.1%	8.0%	0.1%	1.5%	0.0%	2.3%	9.0%	1.5%	2.6%	69.3%
1999	1,563	3.2%	1.1%	5.0%	0.2%	0.4%	0.5%	1.7%	7.5%	2.3%	1.0%	77.2%
State Total 1993	18,414	8.7%	8.6%	24.5%	2.1%	7.1%	0.0%	4.5%	24.0%	6.8%	3.4%	10.2%
1999	18,539	7.5%	8.7%	21.5%	2.4%	6.8%	0.9%	3.3%	25.3%	9.0%	3.1%	11.4%

Note: Approximately 67% of CSU Community College Transfers enter in the Fall term. The remainder enter in the Winter, Spring, and Summer.

DISPLAY 29 Within-Region and Out-Region Community College Transfers to the California State University, Fall 1993 & 1999, 25-29 Age Group

Community College Region of Last Attendance	CSU Region of Transfer (sums to 100%)											
	Number	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Northern CA												
1993	143	68.5%	12.6%	14.7%	1.4%	1.4%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%
1999	214	72.4%	13.6%	9.3%	0.5%	0.5%	0.5%	0.5%	0.0%	0.5%	0.9%	1.4%
Sacramento Area												
1993	337	3.6%	84.9%	5.0%	0.3%	1.2%	0.0%	1.5%	0.9%	0.0%	0.0%	2.7%
1999	380	5.8%	85.0%	3.7%	0.3%	0.8%	0.8%	1.3%	1.8%	0.0%	0.0%	0.5%
SF Bay Area												
1993	1,286	2.9%	3.7%	85.9%	0.4%	0.7%	0.0%	3.5%	1.8%	0.0%	0.1%	1.1%
1999	1,215	1.9%	4.2%	85.3%	0.5%	0.7%	0.7%	1.8%	2.6%	0.4%	0.3%	1.6%
N. Central Valley												
1993	157	7.0%	15.3%	14.6%	43.9%	7.6%	0.0%	6.4%	2.5%	1.3%	0.0%	1.3%
1999	183	7.1%	12.6%	13.1%	55.2%	6.6%	0.5%	1.1%	1.6%	0.0%	0.0%	2.2%
So. Central Valley												
1993	234	3.0%	1.7%	3.8%	0.0%	80.3%	0.0%	2.6%	6.0%	0.9%	0.4%	1.3%
1999	343	2.9%	0.3%	5.2%	0.9%	82.8%	0.0%	1.5%	3.8%	0.9%	0.0%	1.7%
Central Coast												
1993	103	4.9%	10.7%	64.1%	1.9%	4.9%	0.0%	4.9%	1.9%	0.0%	0.0%	6.8%
1999	103	7.8%	1.0%	54.4%	0.0%	1.9%	28.2%	1.9%	2.9%	0.0%	0.0%	1.9%
South Coast												
1993	237	7.6%	2.1%	16.0%	0.0%	7.6%	0.0%	19.8%	38.0%	2.5%	0.4%	5.9%
1999	252	2.0%	2.0%	13.1%	0.0%	3.6%	0.8%	15.1%	55.2%	0.4%	0.4%	7.5%
LA. County												
1993	1,261	1.0%	0.6%	3.5%	0.2%	1.1%	0.0%	1.0%	80.7%	6.1%	3.4%	2.5%
1999	1,416	0.9%	0.4%	2.5%	0.1%	1.1%	0.1%	0.2%	83.8%	8.5%	1.6%	0.8%

DISPLAY 29 Continued

Community College Region of Last Attendance		CSU Region of Transfer (sums to 100%)										
	Number	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Orange County												
1993	571	1.2%	0.2%	4.9%	0.7%	1.1%	0.0%	1.1%	40.5%	45.0%	1.1%	4.4%
1999	750	0.8%	0.3%	1.9%	0.3%	0.5%	0.1%	0.5%	38.8%	53.2%	1.6%	2.0%
San Bern/Riverside												
1993	236	2.5%	0.8%	5.1%	0.4%	0.4%	0.0%	1.7%	20.3%	5.1%	59.7%	3.8%
1999	287	1.4%	0.0%	2.1%	0.0%	0.0%	0.0%	0.3%	19.5%	7.0%	66.2%	3.5%
San Diego/Imperial												
1993	482	3.1%	0.6%	5.4%	0.4%	0.6%	0.0%	1.5%	5.6%	1.0%	1.7%	80.1%
1999	552	2.5%	0.9%	5.1%	0.2%	0.2%	0.0%	0.4%	8.0%	1.3%	1.1%	80.4%
State Total 1993	5,047	4.5%	8.1%	27.5%	1.7%	5.2%	0.0%	2.9%	28.9%	7.2%	4.0%	9.9%
1999	5,047	4.8%	7.8%	22.6%	2.0%	6.0%	0.8%	1.5%	31.2%	9.8%	4.2%	9.4%

Note: Approximately 67% of CSU Community College Transfers enter in the Fall term. The remainder enter in the Winter, Spring, and Summer.

DISPLAY 30 Within-Region and Out-Region Community College Transfers to the California State University, Fall 1993 & 1999, 30-49 Age Group

Community College Region of Last Attendance		CSU Region of Transfer (sums to 100%)										
	Mean Rate	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Northern CA												
1993	220	75.5%	7.7%	13.2%	0.0%	0.9%	0.0%	0.0%	0.9%	0.0%	0.5%	1.4%
1999	227	74.9%	9.3%	11.5%	0.0%	0.4%	1.3%	0.0%	1.8%	0.4%	0.4%	0.0%
Sacramento Area												
1993	353	5.4%	85.3%	4.8%	0.3%	2.3%	0.0%	0.8%	0.6%	0.0%	0.0%	0.6%
1999	351	6.3%	87.7%	2.0%	0.3%	0.6%	0.0%	0.3%	2.0%	0.0%	0.3%	0.6%
SF Bay Area												
1993	1,232	1.9%	3.5%	89.2%	1.3%	0.8%	0.0%	1.2%	1.1%	0.1%	0.0%	0.9%
1999	989	1.3%	4.3%	86.9%	1.5%	0.9%	1.1%	0.8%	2.0%	0.0%	0.4%	0.7%
N. Central Valley												
1993	215	1.4%	9.8%	7.4%	73.0%	6.5%	0.0%	0.9%	0.5%	0.0%	0.0%	0.5%
1999	187	2.1%	12.3%	4.3%	74.9%	2.7%	0.5%	0.5%	1.1%	0.0%	0.5%	1.1%
So. Central Valley												
1993	349	0.9%	0.9%	3.7%	1.1%	89.1%	0.0%	1.7%	1.1%	0.3%	0.9%	0.3%
1999	318	2.2%	0.6%	3.5%	1.3%	88.4%	0.6%	0.6%	1.6%	0.0%	0.3%	0.9%
Central Coast												
1993	119	4.2%	2.5%	85.7%	0.8%	0.8%	0.0%	2.5%	0.8%	0.0%	0.0%	2.5%
1999	111	5.4%	1.8%	34.3%	0.9%	1.8%	49.5%	2.7%	0.9%	0.0%	0.9%	1.8%
South Coast												
1993	180	3.9%	1.7%	5.6%	0.6%	5.0%	0.0%	29.4%	51.1%	0.0%	1.7%	1.1%
1999	189	3.7%	1.6%	6.3%	1.1%	0.5%	0.5%	23.8%	58.2%	0.0%	2.1%	2.1%
LA. County												
1993	1,154	1.2%	0.3%	4.1%	0.3%	1.4%	0.0%	0.4%	80.0%	6.2%	3.7%	1.4%
1999	1,386	0.8%	0.1%	1.4%	0.1%	3.2%	0.0%	0.2%	86.0%	5.0%	2.7%	0.6%

DISPLAY 30 Continued

Community College Region of Last Attendance		CSU Region of Transfer (sums to 100%)										
	Mean Rate	Northern CA	Sac. Area	SF Bay Area	Northern Central Valley	Southern Central Valley	Central Coast	South Coast	L.A. County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Orange County												
1993	488	0.4%	0.6%	3.1%	0.0%	0.4%	0.0%	1.6%	36.9%	48.0%	3.5%	5.5%
1999	530	1.3%	0.2%	1.5%	0.2%	0.4%	0.0%	0.4%	34.9%	56.6%	2.5%	2.1%
San Bern/Riverside												
1993	373	0.3%	0.8%	1.9%	0.0%	1.1%	0.0%	0.5%	12.4%	5.4%	74.2%	3.5%
1999	332	0.9%	0.0%	1.2%	0.6%	0.6%	0.0%	0.0%	16.9%	3.6%	72.9%	3.3%
San Diego/Imperial												
1993	437	1.6%	0.5%	3.4%	0.2%	0.7%	0.0%	0.7%	2.7%	0.5%	1.4%	88.3%
1999	462	1.5%	0.0%	3.5%	0.0%	0.4%	0.0%	0.4%	4.3%	0.0%	0.9%	89.0%
State Total 1993	5,119	4.9%	7.9%	26.8%	3.6%	7.4%	0.0%	2.0%	25.2%	6.4%	6.8%	9.1%
1999	5,082	5.1%	7.9%	19.8%	3.3%	6.9%	1.4%	1.3%	31.5%	7.5%	6.1%	9.1%

Note: Approximately 67% of CSU Community College Transfers enter in the Fall term. The remainder enter in the Winter, Spring, and Summer.

5 Conclusion – The Road Ahead

A PRINCIPAL FINDING that has been echoed through the preceding chapters is that enrollment demand will be significant in nearly all geographic regions of California. Given the recent slowdown in California's economy and labor markets, which most economists expect to continue through at least the first three quarters of year 2002, it is apparent that higher education capital outlay budgets will not even be remotely sufficient to support construction, expansion, and modernization of classroom facilities to accommodate new student demand. Even under the best of economic times, few planners were counting on the State to deliver the more than $1.5 billion estimated to be needed annually for the next 10 years to support the capital construction requirements of public colleges and universities.

Fortunately, all three public systems of higher education have been taking a number of noteworthy steps and initiatives to develop and explore mechanisms to use existing facilities more strategically and cost-effectively to enhance student access and success. These include:

- Expanding year-around operations and evening, weekend, and short-term intensive courses;

- Increasing the use of regional educational centers and joint intersegmental facilities;

- Expanding distributed learning opportunities (e.g., Internet, CD ROM, Digital Cable) to maximize student choice by making learning less dependent on physical space and location; and

- Supporting productive learning environments through the use of technology (e.g., animation, graphics, video, sound) that cause students to be more proficient learners so that they are able to realize their educational goals and aspirations more rapidly.

Most educational evaluators have learned through experience that public policies and programmatic arrangements are more likely to have desired consequences if appropriate evaluative tools have been developed to monitor performance outcomes. This, of course, depends on a policy framework that embraces a shared understanding of the specific performance measures that provide the most illuminating empirical indication that progress in desired outcomes is a direct consequence of selected strategic initiatives.

The Commission intends to form an advisory capacity committee, involving representatives from the public and independent higher education sector, to identify and clarify key performance indicators that could be used to monitor changes in student access and physical capacity associated with the full range of institutional initiatives referenced in this section. It is little wonder that many of the initiatives have a dynamic technology and telecommunications component because of the documented role of technology in enhancing student access and learning (Vosniadou *et al*., 1996; Duffy & Jonassen, 1992; Mayer, 1984). Just recently, Assembly Bill 1123 (Cardoza, 2000) was enacted and requires the Commission to convene an intersegmental working group to develop statewide funding priorities for technology initiatives in higher education and to forward recommendations of the work group to the Legislature and governor by August 1, 2002. Members of the workgroup will be invited to join the capacity advisory committee.

Finally, as mentioned previously, discussions have begun with the University of California and the Association of Independent California Colleges and Universities to determine how the regional enrollment demand described in this study could be modified reliably to estimate enrollment demand on a regional basis for the UC and California's significant independent higher education sector.

Appendices

Appendix A California Community College Institutional Capacity Analysis by Region, 2004-05 & 2010-11, CPEC Low Alternative Forecast

		Fall 2004		Fall 2010	
	FTES Capacity Fall 1999	**Projected FTES Demand**	**FTES Capacity Surplus or Deficit**	**Projected FTES Demand**	**FTESCapacity Surplus or Deficit**
REGION					
Northern California	29,682	35,438	-5,756	31,548	-1,866
Sacramento Area	36,198	58,330	-22,132	50,825	-14,627
San Francisco Bay Area	207,589	222,609	-15,020	231,778	-24,189
North Central Valley	28,097	35,346	-7,249	38,643	-10,546
South Central Valley	44,804	48,839	-4,035	50,731	-5,927
Central Coast	18,397	25,250	-6,853	20,583	-2,186
South Coast	45,027	52,252	-7,225	62,574	-17,547
Los Angeles County	246,809	221,736	25,073	281,604	-34,795
Orange County	102,280	111,315	-9,035	114,273	-11,993
San Bernardino/Riverside	57,384	71,232	-13,848	76,884	-19,500
San Diego/Imperial	80,890	109,821	-28,931	94,181	-13,291
STATE TOTAL	897,157	992,168	-95,011	1,053,624	-156,467

Note: FTES Capacity derived by applying the CPEC adopted space standards to the total square footage of of classroom and lab. space available for community college instruction in each region as of Fall 1999.

FTES Enrollment Projections derived by multiplying regional headcount projections by the ratio of Average Weekly Student Contact Hours (8.8) to the number of contact hours (15) considered equivalent to one full-time student for budget purposes.

Appendix B California State University Institutional Capacity Analysis by Region, 2004-05 & 2010-11, CPEC Low Alternative Forecast Holding Regional College-Going Rates Constant at Fall 1999 Levels

		Fall 2004		Fall 2010	
	FTES Capacity Fall 1999	**Projected FTES Demand**	**FTES Capacity Surplus or Deficit**	**Projected FTES Demand**	**FTESCapacity Surplus or Deficit**
REGION					
Northern California	20,387	20,975	-588	23,436	-3,049
Sacramento Area	20,776	21,394	-618	24,633	-3,857
San Francisco Bay Area	57,864	56,659	1,205	66,827	-8,963
North Central Valley	5,241	6,170	-929	7,071	-1,830
South Central Valley	21,687	21,005	682	24,031	-2,344
Central Coast	4,010	2,346	1,664	2,689	1,321
South Coast	17,672	14,126	3,546	16,066	1,606
Los Angeles County	83,299	88,579	-5,280	97,531	-14,232
Orange County	20,293	21,527	-1,234	28,673	-8,380
San Bernardino/Riverside	12,284	12,343	-59	14,640	-2,356
San Diego/Imperial	29,556	34,824	-5,268	39,781	-10,225
STATE TOTAL	293,069	299,948	-6,879	345,378	-52,309

Note: Capacity figures include projects that are funded in the current 2001-02 budget (2,988 FTES), plus capacities for CPEC-approved permanent off-campus centers and for CSU Channel that is in transition.

FTES Enrollment Projections derived by multiplying the CPEC regional headcount projections by the ratio of Fall 2000 FTES to Fall student headcount.

Appendix C Projections of California Population Growth by Region for Selected Age-Groups, 1998 and 2010

Age Group	State Total	Northern California	Sac Area	SF Bay Area	N. Central Valley	So. Central Valley	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
1998												
15-17	1,362,894	51,607	74,085	248,451	71,579	96,920	28,120	56,536	372,840	101,197	146,109	115,450
18-19	893,349	33,493	51,046	159,919	44,652	60,287	19,584	43,996	236,048	64,139	90,360	89,825
20-24	2,117,739	75,721	111,493	379,742	101,178	137,901	43,451	97,933	573,904	158,860	198,616	238,940
25-29	2,463,902	71,091	107,427	464,256	98,603	138,639	50,238	102,678	734,381	211,809	207,312	277,468
30-49	10,621,815	317,678	538,873	2,297,775	422,981	549,602	219,929	421,245	3,134,507	897,981	942,665	878,579
50-59	3,259,885	120,887	173,091	744,919	137,916	166,766	66,380	140,389	905,012	287,315	268,903	248,307
Totals	20,719,584	670,477	1,056,015	4,295,062	876,909	1,150,115	427,702	862,777	5,956,692	1,721,301	1,853,965	1,848,569
2010												
15-17	1,850,267	53,693	94,728	318,204	89,269	124,012	38,845	71,254	526,319	157,311	209,623	167,009
18-19	1,346,996	38,694	70,853	226,483	62,902	85,972	30,182	58,841	383,340	108,487	146,544	134,698
20-24	2,888,937	99,861	162,747	511,210	146,725	191,469	65,650	129,402	727,208	207,690	329,670	317,305
25-29	2,665,402	102,760	151,945	484,503	144,109	189,469	60,694	112,375	621,748	182,533	309,009	306,257
30-49	10,556,000	349,581	566,464	2,127,418	493,039	605,573	220,107	428,313	2,835,264	851,146	1,084,075	995,020
50-59	5,105,520	181,177	286,023	1,125,146	229,024	270,656	110,922	205,708	1,427,711	417,518	505,509	346,126
Totals	24,413,122	825,766	1,332,760	4,792,964	1,165,068	1,467,151	526,400	1,005,893	6,521,590	1,924,685	2,584,430	2,266,415
Population Change												
15-17	487,373	2,086	20,643	69,753	17,690	27,092	10,725	14,718	153,479	56,114	63,514	51,559
18-19	453,647	5,201	19,807	66,564	18,250	25,685	10,598	14,845	147,292	44,348	56,184	44,873
20-24	771,198	24,140	51,254	131,468	45,547	53,568	22,199	31,469	153,304	48,830	131,054	78,365
25-29	201,500	31,669	44,518	20,247	45,506	50,830	10,456	9,697	-112,633	-29,276	101,697	28,789
30-49	(65,815)	31,903	27,591	-170,357	70,058	55,971	178	7,068	-299,243	-46,835	141,410	116,441
50-59	1,845,635	60,290	112,932	380,227	91,108	103,890	44,542	65,319	522,699	130,203	236,606	97,819
Totals	3,693,538	155,289	276,745	497,902	288,159	317,036	98,698	143,116	564,898	203,384	730,465	417,846
Population Change												
15-17	35.8%	4.0%	27.9%	28.1%	24.7%	28.0%	38.1%	26.0%	41.2%	55.5%	43.5%	44.7%
18-19	50.8%	15.5%	38.8%	41.6%	40.9%	42.6%	54.1%	33.7%	62.4%	69.1%	62.2%	50.0%
20-24	36.4%	31.9%	46.0%	34.6%	45.0%	38.8%	51.1%	32.1%	26.7%	30.7%	66.0%	32.8%
25-29	8.2%	44.5%	41.4%	4.4%	46.2%	36.7%	20.8%	9.4%	-15.3%	-13.8%	49.1%	10.4%
30-49	-0.6%	10.0%	5.1%	-7.4%	16.6%	10.2%	0.1%	1.7%	-9.5%	-5.2%	15.0%	13.3%
50-59	56.6%	49.9%	65.2%	51.0%	66.1%	62.3%	67.1%	46.5%	57.8%	45.3%	88.0%	39.4%
Totals	17.8%	23.2%	26.2%	11.6%	32.9%	27.6%	23.1%	16.6%	9.5%	11.8%	39.4%	22.6%

Source: Department of Finance, Demographic Research Unit; CPEC Staff Analysis

Appendix D

Community College Transfer Rates for the California State University
CPEC 2001 Baseline Forecast

	Age-group				
	19 or less	**20-24**	**25-29**	**30-49**	**50+**
Northern California					
1999	0.3%	6.8%	4.0%	1.5%	0.2%
2000	0.3%	6.8%	4.1%	1.5%	0.2%
2001	0.3%	6.9%	4.2%	1.6%	0.2%
2002	0.3%	6.9%	4.3%	1.6%	0.2%
2003	0.3%	6.9%	4.4%	1.6%	0.2%
2004	0.3%	7.0%	4.5%	1.6%	0.2%
2005	0.3%	7.0%	4.5%	1.7%	0.2%
2006	0.3%	7.1%	4.6%	1.7%	0.2%
2007	0.3%	7.1%	4.7%	1.7%	0.2%
2008	0.3%	7.1%	4.8%	1.7%	0.2%
2009	0.3%	7.2%	4.9%	1.8%	0.2%
2009	0.3%	7.2%	5.0%	1.8%	0.2%
Sacramento Area					
1999	0.3%	6.2%	3.6%	1.3%	0.5%
2000	0.3%	6.2%	3.7%	1.3%	0.5%
2001	0.3%	6.3%	3.8%	1.4%	0.5%
2002	0.3%	6.3%	3.9%	1.4%	0.5%
2003	0.3%	6.4%	4.0%	1.4%	0.5%
2004	0.3%	6.4%	4.1%	1.4%	0.5%
2005	0.3%	6.5%	4.1%	1.5%	0.5%
2006	0.3%	6.5%	4.2%	1.5%	0.5%
2007	0.3%	6.6%	4.3%	1.5%	0.5%
2008	0.3%	6.6%	4.4%	1.5%	0.5%
2009	0.3%	6.7%	4.5%	1.6%	0.5%
2010	0.3%	6.7%	4.6%	1.6%	0.5%
San Francisco Bay Area					
1999	0.3%	5.5%	2.7%	0.9%	0.1%
2000	0.3%	5.6%	2.7%	1.0%	0.1%
2001	0.3%	5.6%	2.8%	1.0%	0.1%
2002	0.3%	5.7%	2.8%	1.1%	0.1%
2003	0.3%	5.7%	2.8%	1.2%	0.1%
2004	0.3%	5.8%	2.9%	1.3%	0.1%
2005	0.3%	5.8%	2.9%	1.3%	0.1%
2006	0.3%	5.9%	3.0%	1.4%	0.1%
2007	0.3%	5.9%	3.0%	1.5%	0.1%
2008	0.3%	6.0%	3.0%	1.6%	0.1%
2009	0.3%	6.0%	3.1%	1.6%	0.1%
2010	0.3%	6.1%	3.1%	1.7%	0.1%

Appendix D (continued)

Community College Transfer Rates for the California State University
CPEC 2001 Baseline Forecast

	Age-group				
	19 or less	**20-24**	**25-29**	**30-49**	**50+**
North Central Valley					
1999	0.3%	7.2%	3.4%	1.3%	0.2%
2000	0.3%	7.3%	3.5%	1.3%	0.2%
2001	0.3%	7.3%	3.5%	1.4%	0.2%
2002	0.3%	7.4%	3.6%	1.4%	0.2%
2003	0.3%	7.5%	3.7%	1.4%	0.2%
2004	0.3%	7.5%	3.8%	1.4%	0.2%
2005	0.3%	7.6%	3.8%	1.5%	0.2%
2006	0.3%	7.6%	3.9%	1.5%	0.2%
2007	0.3%	7.7%	4.0%	1.5%	0.2%
2008	0.3%	7.8%	4.1%	1.5%	0.2%
2009	0.3%	7.8%	4.1%	1.6%	0.2%
2010	0.3%	7.9%	4.2%	1.6%	0.2%
So. Central Valley					
1999	0.3%	6.4%	4.0%	1.5%	0.4%
2000	0.3%	6.5%	4.0%	1.6%	0.4%
2001	0.3%	6.6%	4.1%	1.7%	0.4%
2002	0.3%	6.7%	4.1%	1.8%	0.4%
2003	0.3%	6.8%	4.2%	1.9%	0.4%
2004	0.3%	6.9%	4.2%	2.0%	0.4%
2005	0.3%	7.1%	4.3%	2.0%	0.4%
2006	0.3%	7.2%	4.3%	2.1%	0.4%
2007	0.3%	7.3%	4.4%	2.2%	0.4%
2008	0.3%	7.4%	4.4%	2.3%	0.4%
2009	0.3%	7.5%	4.5%	2.4%	0.4%
2010	0.3%	7.6%	4.5%	2.5%	0.4%
Central Coast					
1999	0.3%	4.9%	2.3%	0.9%	0.1%
2000	0.3%	5.0%	2.4%	0.9%	0.1%
2001	0.3%	5.1%	2.4%	1.0%	0.1%
2002	0.3%	5.2%	2.5%	1.0%	0.1%
2003	0.3%	5.3%	2.6%	1.1%	0.1%
2004	0.3%	5.4%	2.7%	1.1%	0.1%
2005	0.3%	5.6%	2.7%	1.2%	0.1%
2006	0.3%	5.7%	2.8%	1.2%	0.1%
2007	0.3%	5.8%	2.9%	1.3%	0.1%
2008	0.3%	5.9%	3.0%	1.3%	0.1%
2009	0.3%	6.0%	3.0%	1.4%	0.1%
2010	0.3%	6.1%	3.1%	1.4%	0.1%

Appendix D (continued)

Community College Transfer Rates for the California State University
CPEC 2001 Baseline Forecast

	Age-group				
	19 or less	**20-24**	**25-29**	**30-49**	**50+**
South Coast					
1999	0.2%	6.4%	2.9%	0.9%	0.1%
2000	0.2%	6.4%	3.0%	0.9%	0.1%
2001	0.2%	6.5%	3.1%	1.0%	0.1%
2002	0.2%	6.5%	3.2%	1.0%	0.1%
2003	0.2%	6.6%	3.3%	1.1%	0.1%
2004	0.2%	6.6%	3.4%	1.1%	0.1%
2005	0.2%	6.7%	3.4%	1.2%	0.1%
2006	0.2%	6.7%	3.5%	1.2%	0.1%
2007	0.2%	6.8%	3.6%	1.3%	0.1%
2008	0.2%	6.8%	3.7%	1.3%	0.1%
2009	0.2%	6.9%	3.8%	1.4%	0.1%
2010	0.2%	6.9%	3.9%	1.4%	0.1%
Los Angeles County					
1999	0.1%	3.6%	2.9%	1.4%	0.5%
2000	0.1%	3.7%	2.9%	1.4%	0.5%
2001	0.1%	3.7%	3.0%	1.4%	0.5%
2002	0.1%	3.8%	3.0%	1.5%	0.5%
2003	0.1%	3.9%	3.1%	1.5%	0.5%
2004	0.1%	4.0%	3.1%	1.5%	0.5%
2005	0.1%	4.0%	3.2%	1.5%	0.5%
2006	0.1%	4.1%	3.2%	1.5%	0.5%
2007	0.1%	4.2%	3.3%	1.5%	0.5%
2008	0.1%	4.3%	3.3%	1.6%	0.5%
2009	0.1%	4.3%	3.4%	1.6%	0.5%
2010	0.1%	4.4%	3.4%	1.6%	0.5%
Orange County					
1999	0.1%	4.7%	3.2%	1.1%	0.2%
2000	0.1%	4.8%	3.2%	1.1%	0.2%
2001	0.1%	4.8%	3.3%	1.2%	0.2%
2002	0.1%	4.9%	3.3%	1.2%	0.2%
2003	0.1%	5.0%	3.4%	1.3%	0.2%
2004	0.1%	5.0%	3.4%	1.3%	0.2%
2005	0.1%	5.1%	3.5%	1.4%	0.2%
2006	0.1%	5.1%	3.5%	1.4%	0.2%
2007	0.1%	5.2%	3.6%	1.5%	0.2%
2008	0.1%	5.3%	3.6%	1.5%	0.2%
2009	0.1%	5.3%	3.7%	1.6%	0.2%
2010	0.1%	5.4%	3.7%	1.6%	0.2%

Appendix D (continued)

Community College Transfer Rates for the California State University
CPEC 2001 Baseline Forecast

	Age-group				
	19 or less	**20-24**	**25-29**	**30-49**	**50+**
San Bernardino/Riverside					
1999	0.2%	3.8%	2.4%	1.1%	0.5%
2000	0.2%	3.8%	2.4%	1.1%	0.5%
2001	0.2%	3.9%	2.5%	1.2%	0.5%
2002	0.2%	3.9%	2.5%	1.2%	0.5%
2003	0.2%	4.0%	2.5%	1.3%	0.5%
2004	0.2%	4.0%	2.5%	1.3%	0.5%
2005	0.2%	4.1%	2.6%	1.4%	0.5%
2006	0.2%	4.1%	2.6%	1.4%	0.5%
2007	0.2%	4.2%	2.6%	1.5%	0.5%
2008	0.2%	4.2%	2.6%	1.5%	0.5%
2009	0.2%	4.3%	2.7%	1.6%	0.5%
2010	0.2%	4.3%	2.7%	1.6%	0.5%
San Diego/Imperial					
1999	0.2%	3.7%	2.5%	1.0%	0.1%
2000	0.2%	3.8%	2.5%	1.0%	0.1%
2001	0.2%	3.9%	2.6%	1.1%	0.1%
2002	0.2%	3.9%	2.6%	1.1%	0.1%
2003	0.2%	4.0%	2.7%	1.2%	0.1%
2004	0.2%	4.1%	2.7%	1.2%	0.1%
2005	0.2%	4.2%	2.8%	1.3%	0.1%
2006	0.2%	4.3%	2.8%	1.3%	0.1%
2007	0.2%	4.4%	2.9%	1.4%	0.1%
2008	0.2%	4.4%	2.9%	1.4%	0.1%
2009	0.2%	4.5%	3.0%	1.5%	0.1%
2010	0.2%	4.6%	3.0%	1.5%	0.1%

Appendix E Detailed Freshmen Enrollment Demand Projections by Region for the California State University, Fall 1999 to Fall 2010,CPEC 2001 Baseline Forecast, Public High School Graduates Only

Northern CA Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	9.4%	1,061	628	80	124	6	5	12	116	49	5	-	37
2000	9.5%	1,163	689	87	136	7	6	13	127	54	6	-	41
2001	9.6%	1,205	713	90	141	7	6	13	131	55	6	-	42
2002	9.7%	1,226	726	92	143	7	6	13	134	56	6	-	43
2003	9.8%	1,247	738	94	146	7	6	14	136	57	6	-	44
2004	9.9%	1,227	726	92	144	7	6	13	134	56	6	-	43
2005	10.0%	1,209	716	91	141	7	6	13	132	56	6	-	42
2006	10.1%	1,227	726	92	144	7	6	13	134	56	6	-	43
2007	10.2%	1,248	739	94	146	7	6	14	136	57	6	-	44
2008	10.3%	1,281	758	96	150	8	6	14	140	59	6	-	45
2009	10.4%	1,228	727	92	144	7	6	14	134	56	6	-	43
2010	10.5%	1,198	709	90	140	7	6	13	131	55	6	-	42

Sacramento Area Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	9.6%	1,653	217	883	144	5	25	21	170	68	3	3	116
2000	9.7%	1,723	226	920	150	5	26	22	177	71	3	3	121
2001	9.8%	1,776	233	948	154	5	27	23	183	73	4	4	124
2002	9.9%	1,825	239	975	159	5	27	24	188	75	4	4	128
2003	10.0%	1,920	252	1,025	167	6	29	25	198	79	4	4	134
2004	10.1%	1,960	257	1,046	170	6	29	25	202	80	4	4	137
2005	10.2%	2,016	264	1,077	175	6	30	26	208	83	4	4	141
2006	10.3%	2,114	277	1,129	184	6	32	27	218	87	4	4	148
2007	10.4%	2,215	290	1,183	193	7	33	29	228	91	4	4	155
2008	10.5%	2,300	301	1,228	200	7	35	30	237	94	5	5	161
2009	10.6%	2,356	309	1,258	205	7	35	31	243	97	5	5	165
2010	10.7%	2,366	310	1,263	206	7	35	31	244	97	5	5	166

SF Bay Area Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	11.4%	5,928	717	273	3,474	18	59	53	587	302	6	-	439
2000	11.5%	6,110	739	281	3,581	18	61	55	605	312	6	-	452
2001	11.6%	6,266	758	288	3,672	19	63	56	620	320	6	-	464
2002	11.7%	6,419	777	295	3,762	19	64	58	636	327	6	-	475
2003	11.8%	6,607	799	304	3,872	20	66	59	654	337	7	-	489
2004	11.9%	6,703	811	308	3,928	20	67	60	664	342	7	-	496
2005	12.0%	6,817	825	314	3,995	20	68	61	675	348	7	-	504
2006	12.1%	7,173	868	330	4,203	22	72	65	710	366	7	-	531
2007	12.2%	7,344	889	338	4,304	22	73	66	727	375	7	-	543
2008	12.3%	7,749	938	356	4,541	23	77	70	767	395	8	-	573
2009	12.4%	7,712	933	355	4,519	23	77	69	764	393	8	-	571
2010	12.5%	7,757	939	357	4,546	23	78	70	768	396	8	-	574

APPENDIX E (Continued)

N Central Valley Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	8.2%	1,323	132	169	197	360	201	7	135	58	3	4	58
2000	8.3%	1,384	138	177	206	377	210	7	141	61	3	4	61
2001	8.3%	1,435	143	184	214	390	218	7	146	63	3	4	63
2002	8.4%	1,469	147	188	219	400	223	7	150	65	3	4	65
2003	8.4%	1,491	149	191	222	405	227	7	152	66	3	4	66
2004	8.5%	1,516	152	194	226	412	230	8	155	67	3	5	67
2005	8.5%	1,531	153	196	228	416	233	8	156	67	3	5	67
2006	8.6%	1,598	160	205	238	435	243	8	163	70	3	5	70
2007	8.6%	1,643	164	210	245	447	250	8	168	72	3	5	72
2008	8.7%	1,741	174	223	259	474	265	9	178	77	3	5	77
2009	8.7%	1,733	173	222	258	471	263	9	177	76	3	5	76
2010	8.8%	1,710	171	219	255	465	260	9	174	75	3	5	75

So. Central Valley Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	9.7%	2,158	73	24	80	13	1,519	15	198	129	6	4	97
2000	9.8%	2,209	75	24	82	13	1,555	15	203	133	7	4	99
2001	9.8%	2,228	76	25	82	13	1,569	16	205	134	7	4	100
2002	9.9%	2,337	79	26	86	14	1,645	16	215	140	7	5	105
2003	9.9%	2,393	81	26	89	14	1,685	17	220	144	7	5	108
2004	10.0%	2,454	83	27	91	15	1,728	17	226	147	7	5	110
2005	10.0%	2,451	83	27	91	15	1,726	17	226	147	7	5	110
2006	10.1%	2,523	86	28	93	15	1,776	18	232	151	8	5	114
2007	10.1%	2,582	88	28	96	15	1,818	18	238	155	8	5	116
2008	10.2%	2,739	93	30	101	16	1,928	19	252	164	8	5	123
2009	10.2%	2,785	95	31	103	17	1,961	19	256	167	8	6	125
2010	10.3%	2,781	95	31	103	17	1,958	19	256	167	8	6	125

Central Coast Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	8.7%	523	63	37	145	6	39	64	94	27	2	-	46
2000	8.8%	509	61	36	142	6	38	63	92	26	2	-	45
2001	8.8%	527	63	37	146	6	39	65	95	27	2	-	46
2002	8.9%	577	69	41	161	7	43	71	104	30	2	-	51
2003	8.9%	585	70	42	163	7	43	72	105	30	2	-	51
2004	9.0%	588	71	42	164	7	44	72	106	31	2	-	52
2005	9.0%	596	72	42	166	7	44	73	107	31	2	-	52
2006	9.1%	604	72	43	168	7	45	74	109	31	2	-	53
2007	9.1%	638	77	45	177	8	47	78	115	33	2	-	56
2008	9.2%	671	80	48	186	8	50	82	121	35	2	-	59
2009	9.2%	673	81	48	187	8	50	83	121	35	2	-	59
2010	9.3%	689	83	49	191	8	51	85	124	36	2	-	61

APPENDIX E (Continued)

South Coast Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	6.9%	867	78	10	92	4	35	8	301	214	5	-	121
2000	7.0%	913	82	10	97	5	37	8	317	225	5	-	127
2001	7.1%	973	88	11	103	5	39	9	337	240	6	-	135
2002	7.2%	974	88	11	103	5	39	9	338	241	6	-	135
2003	7.3%	1,037	93	11	110	5	41	9	360	256	6	-	144
2004	7.4%	1,046	94	12	111	5	42	9	362	258	6	-	145
2005	7.5%	1,073	97	12	114	5	43	10	372	265	6	-	149
2006	7.6%	1,113	100	12	118	6	45	10	386	275	7	-	155
2007	7.7%	1,181	106	13	125	6	47	11	409	292	7	-	164
2008	7.8%	1,296	117	14	137	6	52	12	449	320	8	-	180
2009	7.9%	1,311	118	14	139	7	52	12	455	324	8	-	182
2010	8.0%	1,298	117	14	138	6	52	12	450	321	8	-	180

Los Angeles County Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	9.9%	7,347	154	15	264	7	73	37	198	5,158	926	59	456
2000	10.0%	7,464	157	15	269	7	75	37	202	5,240	940	60	463
2001	10.0%	7,565	159	15	272	8	76	38	204	5,311	953	61	469
2002	10.1%	7,774	163	16	280	8	78	39	210	5,457	979	62	482
2003	10.1%	8,139	171	16	293	8	81	41	220	5,713	1,025	65	505
2004	10.2%	8,320	175	17	300	8	83	42	225	5,840	1,048	67	516
2005	10.2%	8,642	181	17	311	9	86	43	233	6,067	1,089	69	536
2006	10.3%	9,094	191	18	327	9	91	45	246	6,384	1,146	73	564
2007	10.3%	9,397	197	19	338	9	94	47	254	6,596	1,184	75	583
2008	10.4%	10,169	214	20	366	10	102	51	275	7,139	1,281	81	630
2009	10.4%	10,328	217	21	372	10	103	52	279	7,250	1,301	83	640
2010	10.5%	10,380	218	21	374	10	104	52	280	7,287	1,308	83	644

Orange County Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	9.4%	2,378	86	10	95	2	14	10	117	844	946	5	243
2000	9.5%	2,473	89	10	99	2	15	10	121	878	984	5	252
2001	9.6%	2,622	94	10	105	3	16	10	128	931	1,043	5	267
2002	9.7%	2,742	99	11	110	3	16	11	134	974	1,092	5	280
2003	9.8%	2,826	102	11	113	3	17	11	138	1,003	1,125	6	288
2004	9.9%	2,866	103	11	115	3	17	11	140	1,017	1,141	6	292
2005	10.0%	2,977	107	12	119	3	18	12	146	1,057	1,185	6	304
2006	10.1%	3,159	114	13	126	3	19	13	155	1,122	1,257	6	322
2007	10.2%	3,306	119	13	132	3	20	13	162	1,174	1,316	7	337
2008	10.3%	3,593	129	14	144	4	22	14	176	1,276	1,430	7	366
2009	10.4%	3,686	133	15	147	4	22	15	181	1,308	1,467	7	376
2010	10.5%	3,801	137	15	152	4	23	15	186	1,349	1,513	8	388

APPENDIX E (Continued)

San Bernadino/Riverside Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	7.7%	2,539	63	15	58	10	28	15	94	741	389	866	259
2000	7.8%	2,638	66	16	61	11	29	16	98	770	404	900	269
2001	7.8%	2,772	69	17	64	11	30	17	103	809	424	945	283
2002	7.9%	2,809	70	17	65	11	31	17	104	820	430	958	286
2003	7.9%	2,982	75	18	69	12	33	18	110	871	456	1,017	304
2004	8.0%	3,069	77	18	71	12	34	18	114	896	470	1,046	313
2005	8.0%	3,182	80	19	73	13	35	19	118	929	487	1,085	325
2006	8.1%	3,393	85	20	78	14	37	20	126	991	519	1,157	346
2007	8.1%	3,509	88	21	81	14	39	21	130	1,025	537	1,196	358
2008	8.2%	3,748	94	22	86	15	41	22	139	1,095	573	1,278	382
2009	8.2%	3,724	93	22	86	15	41	22	138	1,087	570	1,270	380
2010	8.3%	3,745	94	22	86	15	41	22	139	1,093	573	1,277	382

San Diego/Imperial Freshman Projections

	Part. Rate	Actual Part.	Nor. CA	Sac Area	SF Bay Area	North Central	South Central	Central Coast	South Coast	LA County	Orange	San Bern Riverside	San Diego Imperial
1999	10.4%	2,701	116	16	140	3	16	14	181	284	30	19	1,882
2000	10.5%	2,822	121	17	147	3	17	14	189	296	31	20	1,967
2001	10.6%	2,877	124	17	150	3	17	14	193	302	32	20	2,005
2002	10.7%	2,941	126	18	153	3	18	15	197	309	32	21	2,050
2003	10.8%	3,021	130	18	157	3	18	15	202	317	33	21	2,106
2004	10.9%	3,079	132	18	160	3	18	15	206	323	34	22	2,146
2005	11.0%	3,162	136	19	164	3	19	16	212	332	35	22	2,204
2006	11.1%	3,326	143	20	173	3	20	17	223	349	37	23	2,319
2007	11.2%	3,463	149	21	180	3	21	17	232	364	38	24	2,414
2008	11.3%	3,666	158	22	191	4	22	18	246	385	40	26	2,555
2009	11.4%	3,643	157	22	189	4	22	18	244	382	40	25	2,539
2010	11.5%	3,709	159	22	193	4	22	19	249	389	41	26	2,585

Appendix F Community College Transfers to the CSU for Regions with 200,000 or more Students

Community College Enrollment Size of Region		Community College Enrollments	Transfer Rates for Primary Age-Groups			
200,000 or More Students			**Overall Mean**	**20 to 24**	**25 to 29**	**30 to 49**
LA County Region						
	1993	311,210	2.0%	3.7%	2.6%	1.3%
	1996	315,475	2.3%	4.4%	3.4%	1.6%
	1999	357,159	1.8%	3.6%	2.9%	1.4%
SF Bay Area Region						
	1993	316,653	2.3%	5.8%	2.8%	1.2%
	1996	321,175	2.3%	6.1%	3.1%	1.2%
	1999	342,512	1.9%	5.5%	2.7%	0.9%

Note: Each tenth (0.1) of a percentage point improvement in the mean transfer rate would represent an annual average of 393 additional transfers over the projection period.

Community College Transfers to the CSU for Regions with 100,000 to 199,000 Students

Community College Enrollment Size of Region		Community College Enrollments	Transfer Rates for Primary Age-Groups			
100,000 to 199,000 Students			**Overall Mean**	**20 to 24**	**25 to 29**	**30 to 49**
Orange County Region						
	1993	179,758	1.7%	4.0%	2.1%	1.0%
	1996	185,043	1.9%	4.7%	2.9%	0.9%
	1999	174,939	1.7%	4.7%	3.2%	1.1%
San Diego/Imperial						
	1993	150,523	1.8%	4.2%	2.2%	1.0%
	1996	155,842	2.0%	4.6%	2.8%	1.2%
	1999	165,857	1.6%	3.7%	2.5%	1.0%
San Bernardino/Riverside						
	1993	89,052	1.7%	3.7%	1.9%	1.2%
	1996	86,680	1.9%	3.8%	2.7%	1.3%
	1999	100,193	1.7%	3.8%	2.4%	1.1%

Note: Each tenth (0.1) of a percentage point improvement in the mean transfer rate would represent an annual average of 172 additional transfers over the projection period.

Appendix F (continued) Community College Transfers to the CSU for Regions with 55,00 to 99,000 Students

Community College Enrollment Size of Region		Community College Enrollments	Transfer Rates for Primary Age-Groups			
55,000 to 99,000			Overall Mean	20 to 24	25 to 29	30 to 49
Sacramento Area						
	1993	68,508	2.9%	6.3%	3.5%	1.5%
	1996	71,871	2.9%	6.7%	3.6%	1.6%
	1999	85,685	2.4%	6.2%	3.6%	1.3%
South Coast						
	1993	71,611	2.2%	6.1%	2.7%	0.8%
	1996	74,179	2.4%	6.6%	3.0%	1.1%
	1999	80,211	2.2%	6.4%	2.9%	0.9%
Southern Central Valley						
	1993	58,241	3.1%	7.1%	3.1%	2.1%
	1996	58,931	3.6%	8.1%	4.5%	2.5%
	1999	72,538	2.7%	6.4%	4.0%	1.5%

Note: Each tenth (0.1) of a percentage point improvement in the mean transfer rate would represent an annual average of 92 additional transfers over the projection period.

Community College Transfers to the CSU for Regions with less than55,000 Students

Community College Enrollment Size of Region		Community College Enrollments	Transfer Rates for Primary Age-Groups			
Less Than 55,000 Students			Overall Mean	20 to 24	25 to 29	30 to 49
Northern California						
	1993	47,898	2.3%	6.0%	2.6%	1.3%
	1996	50,863	2.6%	7.2%	3.8%	1.6%
	1999	52,558	2.5%	6.8%	4.0%	1.5%
Northern Central Valley						
	1993	45,700	2.6%	6.7%	2.6%	1.4%
	1996	47,502	3.0%	7.9%	3.4%	1.6%
	1999	51,137	2.6%	7.2%	3.4%	1.3%
Central Coast						
	1993	27,642	2.4%	6.3%	2.8%	1.2%
	1996	31,392	2.1%	6.1%	3.1%	0.8%
	1999	37,349	1.6%	4.9%	2.3%	0.9%

Note: Each tenth (0.1) of a percentage point improvement in the mean transfer rate would represent an annual average of 63 additional transfers over the projection period.

Appendix G Projections of California Public High School Graduates by Region 1998-99 to 2009-2010

Region of Public High School 1998 to 2010												
	Total	**Northern CA**	**Sac Area**	**SF Bay Area**	**North Central V.**	**South Central V.**	**Central Coast**	**South Coast**	**LA County**	**Orange**	**San Bern/ Riverside**	**San Diego/ Imperial**
1998-99	296,576	11,933	17,222	52,003	16,134	22,243	6,014	12,571	74,213	25,296	32,978	25,969
1999-00	303,409	12,243	17,765	53,133	16,779	22,659	5,820	13,042	75,017	26,034	34,043	26,874
2000-01	310,038	12,553	18,120	54,018	17,286	22,736	5,985	13,705	75,654	27,311	35,533	27,137
2001-02	316,201	12,641	18,434	54,865	17,593	23,729	6,524	13,529	77,349	28,273	35,779	27,485
2002-03	325,758	12,723	19,202	55,991	17,746	24,170	6,575	14,209	80,581	28,832	37,753	27,976
2003-04	329,192	12,392	19,403	56,328	17,940	24,667	6,572	14,129	81,968	28,948	38,600	28,245
2004-05	335,134	12,087	19,767	56,805	18,008	24,512	6,622	14,308	84,730	29,772	39,780	28,743
2005-06	349,173	12,145	20,523	59,279	18,689	25,102	6,674	14,639	88,721	31,281	42,152	29,968
2006-07	358,628	12,237	21,301	60,198	19,104	25,565	7,012	15,338	91,229	32,409	43,318	30,917
2007-08	379,962	12,433	21,906	63,002	20,126	26,981	7,329	16,613	98,251	34,884	45,992	32,445
2008-09	379,484	11,803	22,231	62,195	19,921	27,304	7,317	16,600	99,304	35,440	45,416	31,953
2009-10	379,103	11,411	22,108	62,057	19,546	27,135	7,445	16,231	99,328	36,199	45,389	32,253
Percent Change	**27.8%**	**-4.4%**	**28.4%**	**19.3%**	**21.1%**	**22.0%**	**23.8%**	**29.1%**	**33.8%**	**43.1%**	**37.6%**	**24.2%**
Additional Students	**82,527**	**(522)**	**4,886**	**10,054**	**3,412**	**4,892**	**1,431**	**3,660**	**25,115**	**10,903**	**12,411**	**6,284**

Source: Adapted from *California Public High School Graduates 1999 Projection Series* , Demographic Research Unit, Department of Finance